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ABSTRACT

A federally funded Library Training Institute was held to explore the user/system interface in academic libraries. The institute was composed of 50 librarians including 20% administrators, 20% educators, and 60% public services librarians. Speakers from a number of disciplines including sociology, psychology, criminal justice, and marketing presented librarians with information and concepts to assist them in evaluating and redesigning library environments. This document includes an institute schedule, objectives and themes of the institute, and transcriptions of selected presentations. (Some papers were omitted either because the topics have been well covered in the literature since the institute or because the presentations relied heavily on visual support materials.) Papers presented here include: (1) "Anticipating Needs of Users" (Edward P. Miller); (2) "A Marketing Approach to 'Selling' Service" (John P. Dunn); (3) "Environmental Psychology: Factors in Library Environments" (William H. Ittelson); (4) "Personal Space and Facilities Usage" (Robert Sommer); (5) "Deviant Behavior in the Library" (Dale Welch); (6) "Architectural Approaches to Design and Behavior" (Nancy McAdams); (7) "Needs of Handicapped Users and Recent Legislation" (Alex John, Jr.); and (8) "Question-Negotiation at the Reference Desk: (Judith Braunagel). A wrap-up session including selected participant questions and comments has been included in the transcriptions. (THC)

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# THE USER ENCOUNTERS THE LIBRARY

## AN INTERDISCIPLINARY FOCUS ON THE USER/SYSTEM INTERFACE

ED266791

Edited by

Martin B. Steffenson

Larry D. Larason

A 1978 Library Training Institute
for which funding was provided under
Title IIB of the Higher Education Act of 1965 as amended

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Northeast Louisiana University

Monroe, Louisiana

1986

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## INTRODUCTION

Northeast Louisiana University sponsored a federally funded Library Training Institute* in the summer of 1978 to explore the user/system interface in academic libraries. Speakers from a number of disciplines including sociology, psychology, criminal justice, and marketing attempted to present librarians with information and concepts to assist them in evaluating and redesigning library environments Even though many years have elapsed since this program was conducted, the principal investigatiors felt that these presentations still shed light on problems facing academic libraries in the eighties.

Dr. Alex John's presentation on Section 504 of the Rehabilitation Act of 1973 has been omitted because the topic has been well covered in the literature and implemented by universities across the country. Dr. Judith Braunagel's discussion of Question-Negotiation at the Reference Desk was unfortunately unsuitable for publication because it relied heavily on slides, a videotape screening, and an audiotape dialog. Portions of the talks by Dr. Sommers and Ms. McAdams which relied on slide presentations have also been omitted. Dr. Dunn's presentation is omitted because marketing for libraries has been adequately covered in the literature since the institute was held.

The speakers encouraged audience participation; selected participant questions or comments have been included in the transcriptions. Due to voice recognition problems, individual names are noted only with those comments which were made by members of the reactor panel. Each speaker and reactor has had the opportunity to edit his or her own remarks, but the spontaneity of the occasion still shines through the transcripts, though some of the more spirited exchanges have suffered by being put into printed form.

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*Funding was provided under Title IIB of the Higher Education Act of 1965 as amended.

# LIBRARY TRAINING INSTITUTE

# THE USER ENCOUNTERS THE LIBRARY

## AN INTERDISCIPLINARY FOCUS ON THE USER/SYSTEM INTERFACE IN ACADEMIC LIBRARIES

## PROSPECTUS FOR ACCEPTED PARTICIPANTS

July 31 - August 3, 1978

Northeast Louisiana University - Monroe, Louisiana 71209

Project Director: Dr. Larry Larason 318-342-2195
Assistant Director: Martin B. Steffenson 318-342-2194
Program Chairperson: Rebecca McKillips 318-342-4176

## ABSTRACT

A group of 50 librarians composed of 20 per cent administrators, 20 per cent educators and 60 per cent public services librarians who have been involved in academic librarianship for three or more years and hold, as a minimum, the M.L.S. degree or its equivalent will attend the institute.

Eight speakers will be featured, representing several disciplines which can provide new information and viewpoints with which librarians may attempt to improve their library environments and upgrade their skill in dealing with the users, including the deviant and the handicapped. The environment will be considered in both physical and social aspects, with an emphasis on the concept of environmental programming. Theory and practice will be presented by speakers from the disciplines of marketing, social psychology, environmental psychology, sociology, architecture and library science.

A multiphased evaluation is proposed, including a reactor panel who will verbally assess the presentations at the end of each session and prepare a written evaluation following the institute.

# THE USER ENCOUNTERS THE LIBRARY
## AN INTERDISCIPLINARY FOCUS ON THE USER/SYSTEM INTERFACE IN ACADEMIC LIBRARIES

July 31 - August 3, 1978

Northeast Louisiana University - Monroe, Louisiana

## Schedule

July 31 — Anticipating Needs of Users
  Dr. Edward P. Miller, Dean, School of Library and Information Science, University of Missouri

A Marketing Approach to "Selling" Service
  Dr. John P. Dunn, Professor, Management and Marketing, Northeast Louisiana University

Aug. 1 — Environmental Psychology: Factors in Library Environments
  Dr. William H. Ittelson, Professor of Psychology, University of Arizona

Personal Space and Facilities Usage
  Dr. Robert Sommer, Professor of Psychology, University of California at Davis

Evening Session 6:30 - 9:30

Architectural Approaches to Design and Behavior
  Ms. Nancy McAdams, Office of Facilities Planning, Perry-Casteneda Library, University of Texas, Austin

Aug. 2 — Deviant Behavior in the Library: Design for Control, Dealing Face to Face
  Dr. G. Dale Welch, Head, Department of Criminal Justice, Social Work and Sociology, Northeast Louisiana University

Needs of Handicapped Users and Recent Legislation
  Dr. Alex John, Jr., Assistant to the Vice President for Student Affairs, Coordinator for Compliance of the Handicap Act (Sec. 504, Rehabilitation Act 1973) at Northeast Louisiana University

Aug. 3 — Question-Negotiation at the Reference Desk
  Dr. Judith Braunagel, Assistant Professor, Library Science,
  State University of New York at Buffalo

Wrap-up Session
  Reactor panel and discussion

Reactor Panel:

Dr. Samuel Dyson, Director, Prescott Memorial Library, Louisiana Tech University; Dr. David Kaser, Graduate Library School, Indiana University; Mrs. Roberta A. Scull, Government Publications, Louisiana State University; Larry Stalling, Director, Roux Library, Florida Southern University, Lakeland, Florida.

## Objectives and Theme of the Institute

The overall goal of the institute is to present academic librarians with information and concepts to assist them in planning, re-evaluating, and re-designing library environments to enhance the positive effects on usage.

The environment is composed of two aspects: the physical setting and the social situation. The two are often closely interrelated in that the physical environment may influence behavior and the social situation may change a person's perception and/or use of the physical environment.

The approach to be used at the institute is also two-fold:

1. To present the participants with a conceptual tool for analysis and planning, namely environmental programming. Although the concept is still in the formative stage, the practice has been on-going for several decades, notably in the layout of stores and sales rooms. This concept and related applications and/or principles for application will be discussed from a variety of viewpoints.

2. To examine the human interface in libraries in order to assist the participants in upgrading their skill in dealing with the library user. The emphasis will be on reaching and assisting the average user, but also to be discussed are the problems of planning for and dealing with the handicapped or deviant patrons.

The relationship of the physical setting to behavior is seldom simple or direct, but research is beginning to demonstrate principles which can be applied to the design of man-made environments in order to enhance the efficiency or the satisfaction of the user. Members of disciplines including psychology, sociology and architecture are finding a common ground for discussion and one result is the concept of environmental programming with attempts to consider the behavioral consequences of design and draws from research to make practical application.

Most librarians have not been exposed to the environmental programming viewpoint. The statement by Kilgour, "As soon as users are considered as part of library systems, it is clear that user costs are system costs" expresses a point of view that is seldom encountered in the literature of librarianship. Librarians want to aid users, but they do not often see that principles applied to improve staff performance, including the arrangement and design of the library environment should be considered for application to the users' tasks.

The rationale of environmental programming may be stated as follows: by its design and by the mix and arrangement of facilities within it, each man-made environment implies one or more patterns of use. To the extent that a use pattern has been anticipated and planned for, that pattern may be supported or discouraged.

The goals of environmental programming would include the following:

Through design and arrangement of facilities

1. to support desirable use patterns
2. to enhance the probability that a self-programming user will use the environment efficiently and effectively to achieve his goal of use
3. to reduce potential conflicts between competing use patterns, and
4. to discourage unwanted behavior

The modes employed to achieve these goals include

1. allocation of appropriate space and facilities with proper ambient conditions to support desired behavior or lack of the same for unwanted behavior
2. the use of arrangement to reduce effort required to achieve success in specified patterns
3. consideration of arrangement, display and design as mediating factors to decrease the cost of learning the system and/or to increase the user's proficiency
4. the use of channeling components, (doors, partitions, counters, etc.)

Some aspects of the applications of environmental programming are given below.

The academic library since World War II has become, largely of economic necessity, a self-service institution. In the self-service situation, every user is assumed to be qualified to use the system unless he requests assistance. Unfortunately, many users accept failure or only partial success without requesting help from a librarian through either ignorance or reluctance.

Two approaches to assisting such users are (1) to attempt to structure the system so as to reduce their probability of frustration, and (2) to attempt to encourage their tendency to ask for assistance and/or improve their awareness of the service.

Environmental programming has application in the first case if the frustrations relate to directional assistance; the layout of a building or floor can serve a mediational factor to assist the user. When the user frustration is a result of an encounter with the bibliographic (or conceptual) components of the system, the goal becomes one of encouraging the user to request assistance at the service point. The environmental programmer might approach this problem in several ways:

1. by attempting to reduce the cost of approach, i.e., locating the service point as closely as possible to the major sources of frustration or by placing it in an interceptive position between the source of frustration and the exit
2. by attempting to increase the exposure or visibility of the service point to be assured that the user was aware of its location, and/or
3. by attempting to enhance the perceptual identity of the service point to increase the probability that the user would be aware of the function of the service.

Another type of problem encountered in library environments involves seating for users. The solitary user often prefers relative isolation to avoid distractions. Once a solitary user has occupied one position at a table, other users will seek different tables to avoid violating the first user's personal space. This territorial behavior results in inefficient utilization of the available facilities, or in a crowded situation, dissatisfaction to the users. A variety of reader station designs are available which can alleviate this problem if the aggregate demand for various types of facilities are known. However, each user group probably has its own mix of needs for types of seating situations, and research in an individual environment is usually necessary to determine the appropriate mix of accommodations.

Of concern to the environmental programmer is the problem of control of behavior versus freedom of behavior. The planner often prohibits or limits behavior patterns without intent through oversight by not providing the requisite space or facilities allocations. This is especially critical in providing service for the handicapped.

Librarians need to learn to see the library environment from the perspective of the disabled in order to plan for them, and on the social side, to assist them without inadvertently belittling them. Librarians should also be cognizant of the recent legislation dealing with building design and facilities for the handicapped.

Security in libraries is of increasing concern. Abnormal or deviant behavior is apparently increasing. Most librarians have very little knowledge of how to plan for or deal with deviant behavior. Design for control and prevention of incidents involving sexual deviation, vandalism, etc., is a very broad topic, but an important one. Equally important are techniques of dealing with abnormal behavior in face to face confrontations.

Once the user approaches the service desk to request assistance with the bibliographic components of the library system, he may be unable to frame his question in terms that are clear and precise. The librarian must aid him in reforming his need in a manner congruent with use patterns implied by the bibliographic and reference sources available. This process is referred to as question-negotiation and has been an area of increasing interest and research since Taylor's seminal paper appeared in 1968.

The specific objectives of the proposed institute are given below:

1. To expose the participants to new information and viewpoints from which they can evaluate their own library's environment following the institute.
2. To demonstrate the relevance of knowledge from the other disciplines to librarianship. This is to be an objective of each of the non-librarian speakers. The accomplishment of this objective will be evaluated by an immediate response questionnaire at the end of each daily session and by an overall study at the conclusion of the institute.
3. To demonstrate the value of the concept of environmental programming to library design and evaluation. Although all the speakers may not directly address this topic, it is expected as a cumulative result of the total experience at the institute.
4. To present information which will enable the participants to upgrade their skill in meeting users. Three speakers will deal with aspects of this topic directly; two speakers will present means of reaching users who might not otherwise ask for assistance.

## Plan of Action

Each speaker will be allotted one-half day, or three hours, (i.e., 9:00-12:00; 1:00-4:00) with a 15-20 minute break at mid-point. About 20 minutes will be allowed at the end of the three hours for questions from the floor and the reactor panel.

At the end of each day, and the one evening session, the reactor panel will discuss the day's presentations in terms of relevance to library practice, the practicality of suggested applications and the value of the theories or principles in stimulating library research.

The wrap-up session scheduled for the final afternoon will be primarily a discussion period to be led by the reactor panel. Also, a short presentation will be made by the project director and program chairman on the results of an experiment in the local library dealing with personal space factors in improving utilization of study carrels.* The members of the reactor panel may speak at any length, if they desire, on any of the topics presented or on related topics. It is suggested that they also present anecdotal material from their own experience to illustrate the use and value of environmental programming, problems of dealing with deviants, etc., and to encourage the same from the audience.

*Later published. ED 222 166

## Subject Matter

### Anticipating Needs of Users

The basis of environmental programming is to anticipate the patterns of behavior that will occur within the library. Given an existing structure, objective data can be gathered with which to build models of usage using techniques of systems analysis, operations research, and industrial engineering. The latter discipline, specifically ergonomics, is most often applied to improve efficiency of workers in workplace and task design; the principles are equally applicable to users of systems.

### The Unfilled Need for Assistance: A Marketing Approach to "Selling" Service

Many library users accept failure or only partial success in use of the library rather than request assistance from a librarian. The size of this potential market for service is generally unknown although Line, in 1963, found that 52 per cent of his library users were reluctant to ask for assistance. Swope and Katzer found that 41 percent of their respondents admitted to a need for assistance but 65 percent of these would not ask for aid. Nelson reported in 1973 that the average faculty member in the California system of higher education was aware of only about one-half of the services available to him through the library. Sandock found that 34 per cent of the students she surveyed had never asked for assistance and 18 percent did not know where the reference department was located.

There are parallels in these situations and the problems dealt with by marketing and merchandising. For example, since the need for assistance is often unexpected when the user enters the library, the use of reference service may be regarded as similar to impulse shopping, a contingent type of action. By placing the service point in an interceptive position, thus reducing the cost of approach, the user may be more likely to request aid.

Similarly, the generator departments offering "routine goods" could be located at the farthest point from the entrance with less used materials and services positioned interceptively to increase user awareness, and presumably, usage. Trade-offs between this approach and the more desirable goal of reducing the overall cost of use would require evaluation.

There should be lessons from merchandising that would be of value to librarians in attempting to "package" the service, i.e., enhance the perceptual identity of the service point to ensure that users know its function by adjusting its placement or design.

Motivational research may be of value in understanding why some users accept less than full success in their library use without asking for aid from a librarian.

Marketing may also have valuable lessons for librarians who wish to determine the size and make-up of the untapped market for their service.

### Environmental Psychology: Factors in Library Environments

Environmental psychology is a recently formulated discipline which attempts to study man in his settings rather than in the laboratory While drawing upon prior experimental approaches, it attempts to observe man within a total environment as one component of that environment rather than as an object seen against a ground, and to assess the interactions of the components.

The speaker will also address himself to the limitations of environmental programming in shaping behavior patterns.

### Personal Space and Facilities Usage

Each person carries with him an invisible, culturally defined zone, or territory, of a size varying situationally and into which he permits intrusion by other persons only reluctantly. This is referred to as "personal space." Many behavioral ramifications of this usually unconscious motivation have have been explored. Specifically, several studies have dealt with users distributing themselves spatially in selecting tables and positions within library environments. The consequences of such behavior can result in inefficient utilization of facilities, reluctance to use the library, and/or discomfort on the part of the users. Thus, in allocating space and facilities for users, the factor of personal space must be considered if the user's behavior is to be adequately supported.

### Architectural Approaches to Design and Behavior

There has been an increasing interest since the last decade in behavioral bases of design. Architects have been looking to the social sciences for human information, and as well to operations research and systems analysis for performance evaluation criteria. An overview of these new approaches is provided in Emerging Methods in Environmental Design and Planning, MIT Press, 1970.

The speaker has been involved in the design of the Perry-Casteneda Library at the University of Texas, and will discuss her experience with that project as well as more general topics.

### Deviant Behavior in the Library

Deviant behavior occurring in libraries includes the following types of non-violent action:

a. Sexual (exhibitionism, frottage, etc.)
b. Theft and mutilation in theft of parts of materials
c. Vandalism
d. Drunken and/or drug influenced behavior
e. Graffitti

Violent behavior, less frequently encountered, includes rape, murder and paranoid behavior.

A sociologist-criminologist will address the topics of planning to prevent such behavior and dealing with it face to face.

From an environmental programming standpoint, the principle of planning is to identify the necessary conditions for the behavior patterns to occur and to attempt to remove the conditions or alter them in order to discourage the unwanted behavior. Problems in this approach arise when altering the conditions conflicts with the needs of the average user. For example, many users seek some degree of privacy when using library materials, as do certain deviant types who wish to engage in undesirable behavior; trade-off between supporting one pattern of activity and inhibiting another must be evaluated carefully.

Limitations are apparent in the attempt to control deviant behavior by environmental factors; the librarian will still encounter deviants face to face. The speaker will also address the topic of dealing with irrational and violent behavior in the social and personal aspects.

## Needs of Handicapped Users and Recent Legislation

Handicapped persons are denied the full range of usage of any environment which is designed without consideration of their special needs. Often the lack of special facilities or appropriate arrangements are inadvertent oversights, a lack of awareness on the part of the designer. Recent legislation attempts to remedy this problem, however, the American Standards Association Specifications for Making Buildings and Facilities Accessible to, and Usable by, the Physically Handicapped, which serve as the basis for the legislation, do not specifically cover libraries.

## Question-Negotiation at the Reference Desk

Patrons who seek information in libraries must either attempt to locate materials and information themselves or request assistance from librarians. In requesting assistance, the most serious problem faced by both the inquirer and the reference librarian is one of communication rather than bibliographic selection. The communications process has be described as question-negotiation and it exists as an interface between user and librarian. At this interface the user attempts to describe something he does not know and, by a complex process of interrogation and filtering, an approach to the problem is evolved. The development of an approach to the bibliographic components of the library to locate specific information is termed a search strategy.

The speaker will demonstrate techniques of question-negotiation with videotapes of actual reference encounters and present the results of as yet unpublished research.

## Evaluation

Evaluation of the program of the institute will be accomplished in four phases:

1. A reactor panel composed of four persons who are not otherwise connected with the institute will serve as the external evaluation component. The make up of the panel is as follows:

    a. Dr. Samuel Dyson, Director, Prescott Memorial Library Louisiana Tech University, Ruston, Louisiana
    b. Dr. David Kaser, Graduate Library School, Indiana University, Bloomington, Indiana
    c. Mrs. Roberta A. Scull, Government Publications, Louisiana State University, Baton Rouge, Louisiana
    d. Larry Stallings, Director, Roux Library, Florida Southern University, Lakeland, Florida

    At the end of each daily session the panel will provide verbal response to the presentations.

2. All participants will be requested to complete an immediate response questionnaire at the conclusion of each presentation. This form will ask them to assess the material discussed in terms of relevance to the library situation, practicality of suggestions, and interest generated by the speaker. Also, the institute's organization and format will be evaluated, in part, by this form.

3. The speakers will be asked to evaluate the audience's response to their material and to gauge their own effectiveness in communicating with the participants.

4. The fourth phase is an overall evaluation of the institute to be completed by the participants at the wrap-up session. At this point, the participants will be asked to evaluate the effect of the institute as a whole and to select the most valuable topics.

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# ANTICIPATING NEEDS OF USERS

Dr. Edward P. Miller

A number of years ago, when I was living in Riverside, California, it happened that I was standing in the UCR Library with a rabbi friend of mine. We'd been to a meeting in the building, and the library had closed before our meeting ended. We stood by the circulation desk, in the darkened building, and my friend looked around the space and said:

"You know, I find a library the most demoralizing of places."

Knowing his propensity for study and his voracious appetite for any reading material, I said:

"Bernie, how can you say that? You love to read!"

"That's just the problem," he said. "All these books," and he looked around the room again, "and I can't read them all."

This experience illustrated to me a basic problem of libraries in the context of the human/system or, in industrial engineering (albeit chauvinistic) terms, the man/machine interface. It illustrates one important aspect of what we are here to examine: user needs.

My rabbi friend, as an intelligent student and good library user, had a need to avoid intimidation by the library. If he felt intimidation by the library, consider how much a college freshman must feel when confronted by a great academic institution for the first time.

Admittedly, this particular need to avoid intimidation may not be capable of satisfaction by academic libraries. Anticipating this need, librarians may themselves be frustrated in their desire to satisfy users. But there are user needs which we can anticipate which do lend themselves to satisfaction efforts on the part of librarians. What these might be, and how academic libraries can respond to them is the focus for our workshop this week. Perhaps we might also come up with some ideas to respond to the intimidation felt by many users including my rabbi friend. Our objective in anticipating user needs then is to make the user/library interface as smooth as possible.

## Who Are the Users?

If our objective is to anticipate needs of users, the first step in the process to achieve this must be to identify the users, actual and potential.

In an academic environment several groups are obvious:

* * * * * * * * * * * * * * * * * *

ADMINISTRATION
FACULTY
STUDENTS
STAFF
GENERAL PUBLIC (particularly in a tax supported institution)

Figure 1

* * * * * * * * * * * * * * * * * *

These groups can be broken into subgroups in a classificatory arrangement:

* * * * * * * * * * * * * * * * * *

ADMINISTRATION
--Various Departments and Divisions
e.g. Academic Affairs
    Business Affairs
    Physical Plant
    etc.

FACULTY
--Teaching
  - Various disciplines

--Research
  - Various disciplines

STUDENTS
--Graduate --Undergraduates
  - Various disciplines
  - Ph.D.
  - Masters
  - Professional

(Some will use the library more than others for their job related information needs.)

--Professional
--Non-professional
--Library Staff

--Industry & Business
--Government
--Other Libraries
--Personal (Individuals)

Figure 2

* * * * * * * * * * * * * * * * * *

Priorities of importance might also be placed on these groups. These could probably be broken down even further: age, ethnic background, handicaps, etc., relating to the objectives of the institution although this may not be necessary at this point for institutional objectives will be related to uses, i.e. user needs.

## User Needs

Having identified who the users might be, the uses they make of the library or might make will direct attention toward what their needs might be. This must be related to the objectives of use by these various groups. But this must also relate to the institutional objectives:

* * * * * * * * * * * * * * * * * *

INSTITUTIONAL OBJECTIVES

1. TEACHING
2. RESEARCH
3. SERVICE

Figure 3

* * * * * * * * * * * * * * * * * *

Relating to all of these, the objective of the academic library is to provide information for whatever purpose in whatever form it is most effective. User objectives then could be summed up by the statement, for all groups of users:

* * * * * * * * * * * * * * * * * *

TO ACQUIRE THE MOST RELEVANT INFORMATION
FOR THE TASK AT HAND

Figure 4

* * * * * * * * * * * * * * * * * *

In achieving this objective, the most obvious needs will be informational. These needs are the ones to which every librarian is most sensitive. And we are probably most sensitive to them as they relate to faculty and students.

* * * * * * * * * * * * * * * * * *

SUBJECTS (relate to)
--Academic Disciplines
--Interdisciplinary studies
  e.g. Bioethics

LEVELS (relate to)
--Depth
  Course Related
  Research
  Recreation

ALSO, BOTH RELATE TO SUBJECT AND LEVEL
--Administrators
--Staff
--General public
--Faculty and students

Figure 5

* * * * * * * * * * * * * * * * * *

In achieving this objective, however, there are other needs that users have. One of these is illustrated by my rabbi friend. They may be characterized by other subdesignations:

* * * * * * * * * * * * * * * * * *

OTHER NEEDS OF USERS

Functional, what the user does
--Browsing, access
--Study
--Reading
--Getting help from staff
Environmental
--Physical Facilities
--Staff Assistance
--Ambience, Atmosphere
--Location

Figure 6

* * * * * * * * * * * * * * * * * *

These certainly relate closely to each other. All are affected by elements of the library in either a supportive, satisfying way or in a frustrating, non-supportive way. Let's look at them in another way and consider:

### Elements of the Library Responding to Needs

Informational. The most effective response to informational needs will be the library's collection. But concommitant with the collection will be the services provided to assist in access to it and in access to information not included in it. Obviously no library can have everything. Resource sharing is essential, networks, and all these imply will readily come to mind in response to informational needs. The subject disciplines covered by the collection and the depth of the collection in each will largely be determined by the institutional programs on the campus. In other words, academic librarians can easily anticipate these needs and have been adept in responding to them, of course within the limitations of acquisitions budgets and the costs of materials.

Functional. What users do in their search for information underlies any consideration of their needs in the process. Here, then, we can consider the services a library provides to facilitate the information gathering function. Edward Jestes, in a protogametal article (1) on the activity of finding a book in a reference room, identified the complicated process a person must follow in the average reference information research. In his analysis he showed many of the human factors considerations, including even the problem of having to back away and lean over in order to read the inscriptions on catalog cards in the drawers of the card catalog. His was a description of a self-service activity. Other elements in the process, however, will involve the user with staff and service elements provided by signs, equipment, arrangement of materials, and such. In this enterprise even the hours of service can be a strong influence in responding to users' informational needs. Staff attitudes and competencies will also loom large as influences on satisfaction for user needs.

Environmental/Physical. Perhaps the most satisfying factor in the library physical environment is the location of the library itself. How can any informational need be fulfilled if the user cannot find the library? Or if the library is inaccessible? On the other side, however, we must admit that faculty members all want the library in the rooms next to their offices, if they can't have it right in their offices. Hence, accessibility and visability become trade-offs with feasibility and accountability. The influence of physical location on satisfaction of user needs is obvious to anyone who has inadvertently used the terms "remote storage" within the hearing distance of faculty members.

Coupled with physical location are the influences of building design and landscaping. Perhaps members of academic communities will say they don't care about cosmetics in library facilities. But the attractiveness of buildings and their environs does influence the user in either a positive or negative way in his/her approach to the institution.

Once inside the library there are many physical factors which affect the user to encourage or discourage information seeking. Arrangement of the collection, open or closed stacks, study and seating provided, and directional or locational signs immediately come to mind. The interior decor including use of color, furniture, and other aesthetics can help the user. "Where are the bathrooms?" the user might ask. Whether or not the reference librarian tallies that for the annual accountability statistics, the question identifies a need that could easily abort the information seeking process. Then, too, the lighting, heating, and/or air conditioning, policies regarding smoking and control of the inner atmosphere are also influential.

The environmental/physical factors, if influential on users can be identified and handled. Once again, consider who the users are and what they do in using the facility. Physical facilities are important in helping satisfy user needs. Indeed they can, in and of themselves satisfy needs. Tomorrow will provide opportunity to delve into this aspect in detail.

## Evaluating Effectiveness of Response of Needs

What I have done so far is suggest some potential needs, that is, the more obvious things that users might appreciate in their informational desires. Actual needs of your clientele will probably include many of these elements; but each library and each population of users will have specific needs and differing priorities. The thrust of this week is to help you identify these specifics and their priorities, then provide some suggestions for satisfying them.

In anticipating needs, one must consider the difference between wants and needs. Usually this caveat must be made at the outset of any investigation of what specific needs users have and their relative importance to each other. To ask users what they need can be interpreted by them as asking them what they want or would like to have. Perhaps the reduction ad absurdum of needs vs. wants can be demonstrated by one of my favorite limericks:

> There once was a priest in Vermont
> Who kept tropical fish in the font.
> He admits it surprises
> The babes he baptizes
> But it seems to be just what they want.

The point is, that any survey to determine needs of users should identify the alternatives that are feasible. We've already identified that faculty members want the library in their pockets, but it is probably infeasible to put the whole collection in ultra-fiche and provide each with a portable reader. With this caveat in mind, then, what can be done to determine user needs?

You know you can't take care of all unsatisfied needs at once; so there is no reason to open a Pandora's box and study the whole library at once. Therefore, decide on one subsystem and concentrate on that. Before looking into what might be possible user need or needs in that subsystem, analyze the system itself: identify its objective(s), determine the elements that comprise it (activities and procedures), define the relationships within it, then model it (probably a flow chart). In other words do a system analysis to know what is being done.

As an example, consider the discharging procedure in a circulation department. Figure 7 (on a separate following page) shows a procedure for checking books back into the library. The numbers in circles show physical handling of a book.

One objective is to get the materials back on the shelf as quickly as possible for further use. Another is to purge the record system so a user will not be charged with possession after returning the item. We have identified two potential user needs within these objectives: a clean record and opportunity to have access to an item with a minimum of delay after some other user has finished with it. The analysis can improve the ability of the particular subsystem to satisfy these needs.

Examination of the system can identify the variables in the system that might influence the improvement of activities to respond to the needs of the users of that system. For example, the discharging procedure can be altered by reducing the number of times a book is handled physically. Figure 8 shows a changed procedure to reduce the number of times an item is handled from 7 to 3. Instead of handling books, circulation cards were easier to transport and handle.

One approach to satisfying user needs, then, is to make the internal operations of the system as effective and efficient as possible.

Another is to go outside the system and gather data from the users themselves. Remember, by this point we've already identified who the users and potential users are, at least by groups. As an example of how this might be done, the following project was performed in a branch library of the University of Oklahoma. (2)

## A Method to Determine User Satisfaction

The objective of this study was to present a means whereby the librarian could measure how to make more effective those library operations which would fulfill the total organizational objectives. Concommitant with this was the improvement of library decision-making.

It was based on the assumption that a more effective library operation would more fully satisfy user needs. A prime assumption in their experience with information gathering is the library environment. This is based on the concept of the library user as a decision maker: deciding to go to the library or not, deciding whether to use it or not, and deciding finally whether or not to finish the current usage. To illustrate this decision process, Figure 9 shows a flow chart of the three decision network.

In the diagram, each decision point has indications of "influences" which will contribute to whether the decision is "Yes"

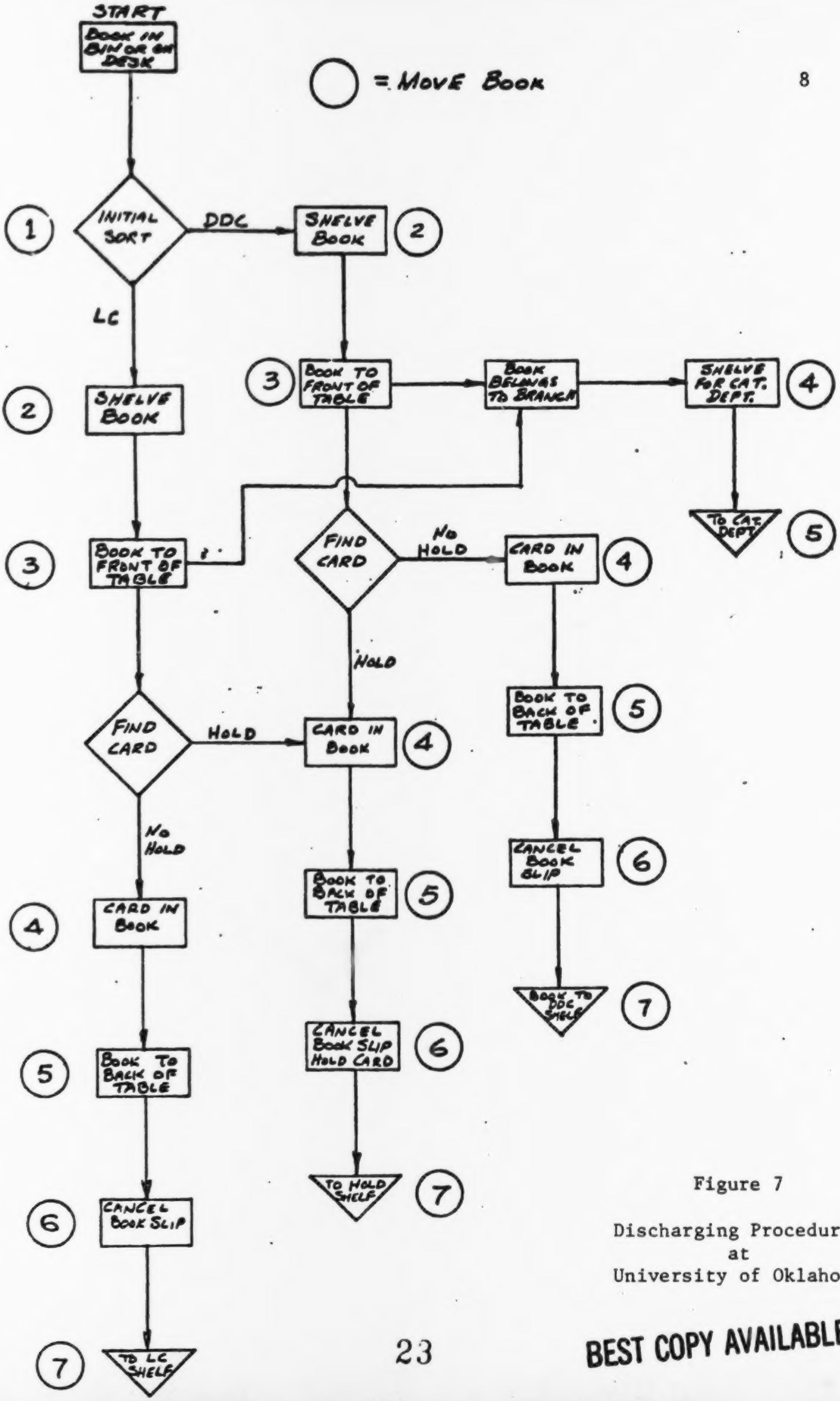
START
BOOK IN BIN OR ON DESK
○ = MOVE BOOK
1
INITIAL SORT
DDC
SHELVE BOOK
2
LC
2
SHELVE BOOK
3
BOOK TO FRONT OF TABLE
BOOK BELONGS TO BRANCH
SHELVE FOR CAT. DEPT.
4
TO CAT. DEPT.
5
3
BOOK TO FRONT OF TABLE
FIND CARD
NO HOLD
CARD IN BOOK
4
HOLD
BOOK TO BACK OF TABLE
5
FIND CARD
HOLD
CARD IN BOOK
4
CANCEL BOOK SLIP
6
NO HOLD
BOOK TO BACK OF TABLE
5
4
CARD IN BOOK
BOOK TO DDC SHELF
7
CANCEL BOOK SLIP HOLD CARD
6
5
BOOK TO BACK OF TABLE
TO HOLD SHELF
7
6
CANCEL BOOK SLIP
7
TO LC SHELF

Figure 7

Discharging Procedures
at
University of Oklahoma

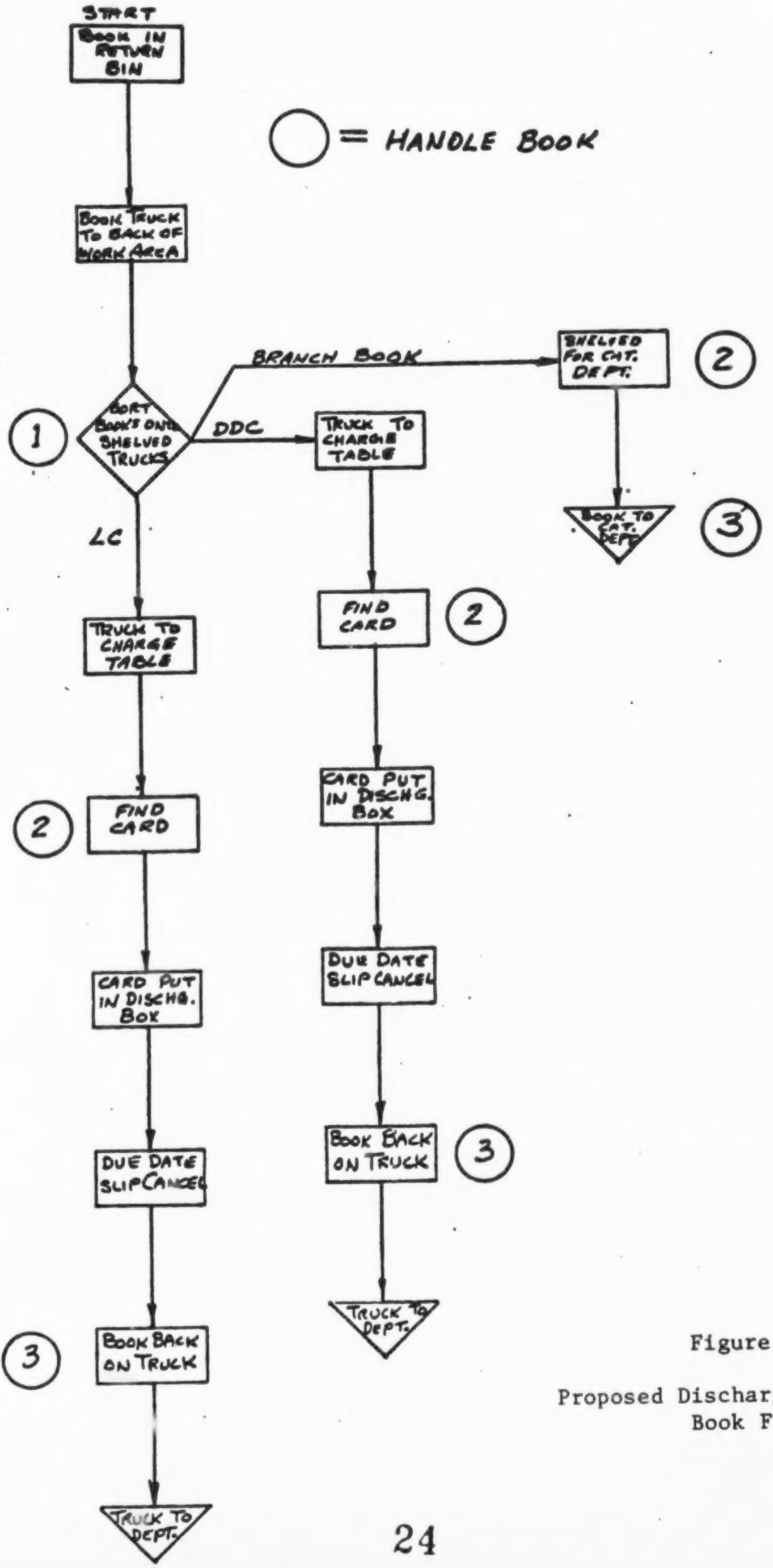
START
BOOK IN RETURN BIN
○ = HANDLE BOOK
BOOK TRUCK TO BACK OF WORK AREA
1
SORT BOOKS ONTO SHELVED TRUCKS
BRANCH BOOK
SHELVED FOR CAT. DEPT.
2
BOOK TO CAT. DEPT.
3
DDC
TRUCK TO CHARGE TABLE
FIND CARD
2
CARD PUT IN DISCHG. BOX
DUE DATE SLIP CANCEL
BOOK BACK ON TRUCK
3
TRUCK TO DEPT.
LC
TRUCK TO CHARGE TABLE
2
FIND CARD
CARD PUT IN DISCHG. BOX
DUE DATE SLIP CANCEL
3
BOOK BACK ON TRUCK
TRUCK TO DEPT.

Figure 8

Proposed Discharge Procedure
Book Flow

or "No" in each case. A "Yes" decision can be interpreted as user needs being satisfied. The influences are dependent on various aspects of library operation as they have been experienced by the client in previous uses or during a current use of the library facilities and services.

A further assumption has been necessary to this development. It is assumed that the client does not know exactly what can or cannot be done to improve the probability of his making a "Yes" decision at the three decision points in Figure 9. When presented with feasible alternatives, however, he is quite capable of ranking them in order as they influence his decision-making positively (to use, continue to use, and finish using) or negatively.

## An Effective Measure

In terms of the diagram in Figure 9 the objective of library management is to increase the probability that every client will follow the flow path through to the end by the "Yes" outlets from the decision points. A library operation can be considered more effective, then, if a higher number of potential clients make initial decisions to use library services. This concept implies a comparison with some entity which could be "less" effective and this is how the feasible alternatives can be ranked by clients. The measure of effectiveness is based on a scale indicating the favorable influence of each on client decision-making. Those which increase the probability that clients will use the library are considered more effective.

The measure developed here concentrates on aspects of the library operation. By this is meant those elements of physical facilities, staff qualities and capabilities, policies, and collection of materials that could influence client decisions. For example, the location of the library could be inconvenient, or the staff could be incapable of providing the assistance needed. Further, policies might be such that a client is unable to check out materials needed, or perhaps the materials needed are not in the library's collection. In these instances, the very nature of these particular aspects of operation would have a negative influence on client decision making.

The client might be able to identify negative aspects but be unable to suggest remedies. However, when presented with feasible remedial alternatives related to particular aspects s/he can determine subjectively what effect each will have on his/her decisions in the three points of Figure 9. Over a range of alternatives, then, the client can perform a ranking of the positive influence of each alternative in relation to the other alternatives presented.

In library management the alternatives ranked highest by client opinion can be considered as more effective in achieving library objectives of satisfying user needs than those ranked lower on the scale. For example, if the loan policy allows a two-week extra-library use and a feasible alternative to this is to change the loan

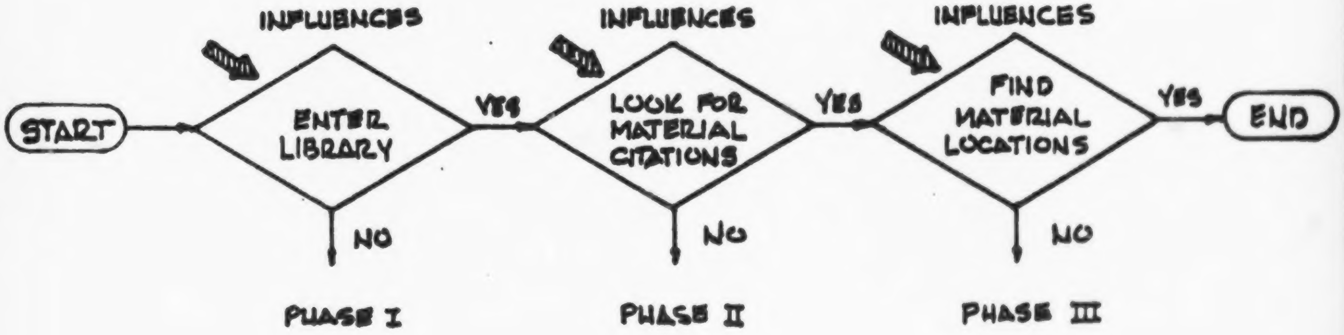
INFLUENCES
INFLUENCES
INFLUENCES
START
ENTER LIBRARY
YES
LOOK FOR MATERIAL CITATIONS
YES
FIND MATERIAL LOCATIONS
YES
END
NO
NO
NO
PHASE I
PHASE II
PHASE III

FIGURE 9: Flow Chart of User/Library Interface

period to four weeks, it is possible that one or the other will rank higher in the opinion of the clients. Whichever ranks higher can be the alternative which will be more effective in encouraging "Yes" decisions in the context of Figure 9.

A Method to Quantify Opinion. The first step in the process of using such a measure of opinion is to determine the most influential aspects of operation. It is customary for managers to consider the operations as effective under the constraints applied by budgets and policies imposed from a parent organization. Clients are largely unaware of these constraints unless they complain and are told about them, usually in the form of an excuse. Often managers are not aware of what aspect of operations are important to clients until complaints are voiced. Complaints are often treated somewhat casually, particularly if couched in critical terms. It is necessary, then, for the manager to find some way to uncover those aspects of operation which are of highest importance to clients, and to do it in a way that removes the emotional elements present in the complaint environment. What is called for here is a "concert" evaluation involving both the system operators and the system users or clients.

Management Input. A list of potentially influential aspects is drawn up by the system operators. This list will certainly include only those aspects which could be changed if change is called for. For example, under the general heading of physical facilities, it might be completely infeasible to consider moving the library or enlarging it. On the other hand, it could be quite within the realm of possibility to alter the arrangement of furniture to provide more study space for in-library use, or conversely to provide more space for collection and less for in-house use of materials. The list prepared by operators would include the latter two alternatives, but ignore the first.

In the process of preparing this list, however, a pilot group of clients could be selected to help. It is quite possible that the library operators will need some input at this stage from clients to be sure that they have not overlooked an aspect which is of high importance to clients.

Client Input. When the list is complete, the clients themselves must be queried to determine those aspects which are, in fact, most influential. The size of the client sample will depend on the size of the library client population. In a small operation, it could well include all library users and maybe non-users. In a large operation it will be necessary to select a random sample.

The clients are each presented with the prepared list of operational aspects considered most influential. This can be presented in ballot form such as the one shown in Figure 10.

* * * * * * * * * * * * * * * * * * * * *

ASPECT RANKING

A. Physical Facilities Rank
  1. Arrangement of Space ____
  2. Lighting ____
  3. Location ____
  4. Size ____

B. Collection & Services
  5. Arrangement of Collection ____
  6. Bibliographic & Indexing Services ____
  7. Currency of Materials ____
  8. Retention Characteristics ____
  9. Availability of Materials (Bindery) ____
  10. Current Awareness Offered ____

C. Staff
  11. Attitudes ____
  12. Qualifications ____

D. Policies
  13. Access to Stacks (open/closed) ____
  14. Circulation ____
  15. Personal User Habits ____

Figure 10: Hypothetical list of aspects in questionnaire form

* * * * * * * * * * * * * * * * * * * * *

Each respondent is asked to rank the items in the list in order of their individual influence on his decision-making in library use. People are quite capable of doing this. For example, it is possible for persons to rank their own opinions of apples, oranges, or bananas on a specified scale. If given a scale of numbers from one to ten, a person can place bananas, say, at a level of nine, apples at a level of six and oranges at a level of four. This will result in a quantified comparison of the three fruits. In the case of operational aspects a scale of one to a hundred is better or at least the number being ranked is better, allowing for a more refined ranking procedure. In the example, with 15 aspects to be ranked, the scale can be 1 to 15.

When all responses are made, (and it is suggested that it can be done in an interview mode to provide explanations for each) the various aspects can be ranked. This step is performed for each user and the results displayed in matrix form. The evaluation process could end here simply by adding the columns and selecting as most influential those aspects having the lowest "scores." This would not allow, however, for a total comparison between all aspects nor between all respondents.

In order to make a comparison between aspects on the basis of client response, it is necessary to perform a statistical manipulation of the data. Thurston's Law of Comparative Judgment, as modified by Nightengale (3) is a method to determine the ranking for all aspects over the total sample of respondents. It makes use of the principle of discriminal dispersion wherein the opinions of judges about several variables are combined into a single scale. It involves manipulation of the data for results as shown in Figure 12. Figure 12 shows the relative number of times each aspect is ranked higher than every other aspect over the total sample of opinions. The final calculations result in a column such as that shown in Figure 13. It shows the mean value of the relative significance of each item in the list of influential aspects. This column has been normalized (to sum of 1.00) and is plotted on a curve as shown in Figure 14.

In Figure 14, an arbitrary level of satisfaction has been chosen and is shown as the vertical line. What this means is that those aspects shown on the curve in the upper 75 percent (to the right of the line) are the ones that will influence 75 percent of the users. This can be chosen as 50 percent, or any other percent, depending on how much the library management feels could reasonably be satisfied through alterations. At this point in the application, the library management will have a reduced list of operational aspects: a list of only those aspects (10, 11, 12, 13, 14, and 15) which are most influential on the decision-making of clients in a certain percentage of all cases. These, then are the aspects toward which most consideration for change can be directed.

What Changes to Make. Having determined those aspects which have the most influence on clients, it is now necessary to find out what alternatives are available within each aspect to improve the effectiveness of the library operations. Then it will be necessary to find out which alternatives will have the most positive effect on the clientele. At the same time it is also necessary to include some measure of feasibility for each alternative. The result of this phase of the application will be a suggested plan of action or at least a priority rating for various action alternatives.

Determining Feasible Alternatives. Having the list of most influential aspects, the library manager can consider each in turn with the view to what changes might be effected. For example, as suggested earlier, if circulation policies are highly influential, some alternatives might be to lengthen the period, to shorten it, or to do away with it altogether. It will not be enough, however, simply to list these. In addition, the preparer of the list must consider two other elements: feasibility and cost. By feasibility is meant the probability that such an alternative can actually be chosen and the suggested change be

| i \ j | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | - | 7 | 6 | 5 | 6 | 6 | 2 | 5 | 4 | 2 | 2 | 2 | 0 | 3 | 3 |
| 2 | 3 | - | 5 | 4 | 6 | 4 | 2 | 3 | 2 | 2 | 2 | 2 | 0 | 3 | 1 |
| 3 | 4 | 5 | - | 2 | 7 | 4 | 1 | 5 | 4 | 2 | 2 | 2 | 1 | 3 | 2 |
| 4 | 5 | 6 | 8 | - | 8 | 5 | 2 | 5 | 4 | 1 | 3 | 3 | 1 | 4 | 3 |
| 5 | 4 | 4 | 3 | 2 | - | 1 | 0 | 3 | 1 | 0 | 2 | 0 | 1 | 2 | 1 |
| 6 | 4 | 6 | 6 | 5 | 9 | - | 3 | 6 | 4 | 2 | 3 | 1 | 1 | 2 | 1 |
| 7 | 8 | 8 | 9 | 8 | 10 | 7 | - | 5 | 6 | 2 | 4 | 4 | 1 | 5 | 1 |
| 8 | 5 | 7 | 5 | 5 | 7 | 4 | 5 | - | 3 | 1 | 4 | 4 | 1 | 4 | 1 |
| 9 | 6 | 8 | 6 | 6 | 9 | 6 | 4 | 7 | - | 2 | 3 | 2 | 1 | 3 | 2 |
| 10 | 8 | 8 | 8 | 9 | 10 | 8 | 8 | 9 | 8 | - | 4 | 7 | 4 | 8 | 5 |
| 11 | 8 | 8 | 8 | 7 | 8 | 7 | 6 | 6 | 7 | 6 | - | 7 | 3 | 7 | 6 |
| 12 | 8 | 8 | 8 | 7 | 10 | 9 | 6 | 6 | 8 | 3 | 3 | - | 3 | 6 | 3 |
| 13 | 10 | 10 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 6 | 7 | 7 | - | 7 | 7 |
| 14 | 7 | 7 | 7 | 6 | 8 | 8 | 5 | 6 | 7 | 2 | 3 | 4 | 3 | - | 4 |
| 15 | 7 | 9 | 8 | 7 | 9 | 9 | 9 | 9 | 8 | 5 | 4 | 7 | 3 | 7 | - |

Figure 12

Matrix Showing Number of Times
Parameter i (row)
Judged More Significant
Than Parameter j (column).

| Alternative | Cum. Norm. Significance |
|---|---|
| 5 | .015 |
| 2 | .030 |
| 3 | .050 |
| 1 | .070 |
| 16 | .085 |
| 8 | .110 |
| 4 | .130 |
| 9 | .165 |
| 14 | .200 |
| 7 | .245 |
| 12 | .305 |
| 11 | .440 |
| 15 | .640 |
| 10 | .810 |
| 13 | 1.000 |

Figure 13: Relative Aspect Significance

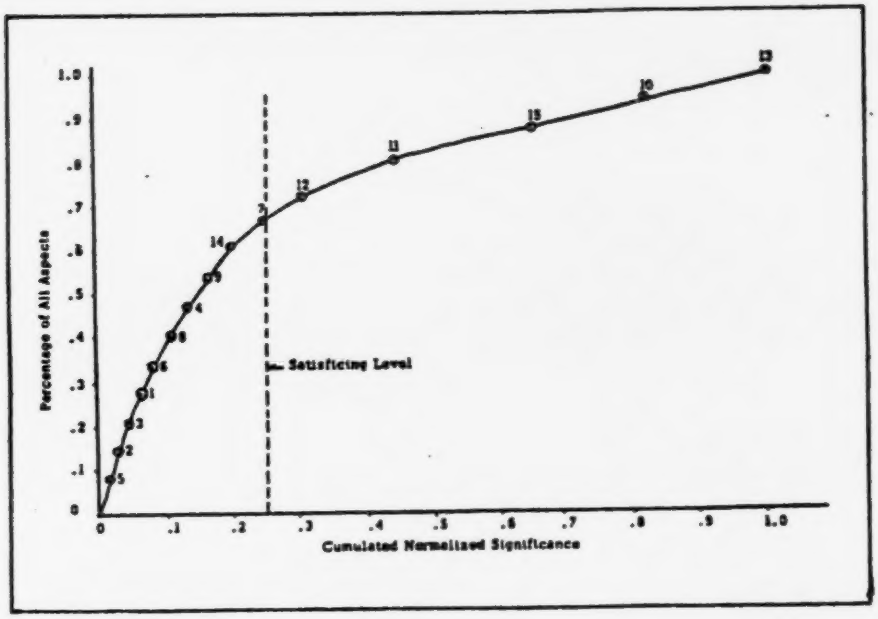

Figure 14: Significance Curve

made. By cost is meant the advantages and disadvantages to the client if such a change were effected.

In conference with upper management, the probabilities for each alternative can be assessed and recorded. For example, to remove the loan period completely might be out of the question for materials that are classified. On the other hand to lengthen the loan period might have a probability of .75 that it would actually be done since it would necessitate reprinting of some supplies or the purchase of a new date stamp, or some other problem. One caveat must be made here: that such probabilities be kept within the management circle until the final results of alternative choice have been made by the clients. To allow disclosure of this information before clients have been offered the opportunity to select their own preferences would almost certainly bias whatever responses they could give.

Having suggested various alternatives within the most influential areas of library operation, the evaluator is able to return to the client sample with another query, slightly different in form from the first. A type of ballot can be constructed, as shown in Figure 15, to allow for a "yes" or "no" vote by each respondent on each alternative. This can be done either by interview or by questionnaire.

* * * * * * * * * * * * * * * * * * * * *

| | %Yes | %No | Total |
|---|---|---|---|
| Alternative 1 | ____ | ____ | 100% |
| Alternative 2 | ____ | ____ | 100% |
| Alternative 3 | ____ | ____ | 100% |

Figure 15: Alternative Effects Ballot

* * * * * * * * * * * * * * * * * * * * *

Each respondent is asked to vote for and against each alternative by inserting a percentage for each under "yes" and "no," summing to 100. This is to reflect his own attitude or opinion about each. Together with the list, it is also necessary to show each respondent the possible outcome of the change suggested by the alternative in terms of advantages and disadvantages to him/her. For example, the alternative to completely remove the loan period might seem very attractive to him, the advantage being that he would not have the bother of overdue notices, or of having to bother with returning an item he was using constantly. On the other hand, it would mean that some materials he might want in the future could be unavailable to him because somebody else had them out and wouldn't return them. Such a disadvantage could well lower his "yes" response.

When all responses are received, those alternatives within each category with the highest mean value will be the ones which will not only have the most positive effect on clients, but also will affect the most clients. However, it remains necessary to apply the feasibility measure. Since the opinion measure is in a percentage form, it can be multiplied by the probability that the change suggested will actually be made. This results in a joint measure of the value of making that change and the feasibility of making it. For example, if the circulation policy change from a two week period to a four week period received a mean "yes" vote of 70 percent and had a feasibility measure of 50 percent probability of being instituted, the total effectiveness measure would be 37.5 percent. On the other hand, if the change to three weeks received only a 60 percent opinion response on "yes" and had a feasibility measure of 75 percent, its total would be 45 percent. In this case the latter would be the better alternative.

The final tally of all alternatives with their scores on the client opinion of influence coupled with their feasibility measures will show the manager those changes which can be made to increase the effectiveness of his library operation. The tally can serve as a priority list of things to do as resources become available; a list of actions to be included in any planning of future operations.

Studies may be simple or complex. Any study should relate to the objectives of the system involved and the standards of performance necessary to satisfy user needs. And they will identify the variables in the system on which data can be gathered.

To recap: Identify who the users (potential and actual) are; their objectives and the institutional objectives; and always keep in mind the trade-off between satisfying completely and the constraints of feasibility.

After the break I want to divide the group into groups to discuss two related questions:

1. What are three (3) major factors that could be included in anticipating user needs in your libraries? (Identify the subsystems involved.)

2. What study could be performed to gather data on user needs in each? (Identify the influential variables.)

## REFERENCES

(1) Edward N. Jestes, "An Example of Systems Analysis: Finding a Book in a Reference Room," Special Libraries 59 (November 1968): 722-728.

(2) Edward P. Miller, "A Methodology to Determine Effectiveness of Special Library Operations," Ph.D. Dissertation, 1972, University of Oklahoma. Presented in part at the 21st International Technical Communications Conference, St. Louis, Missouri, May 1974.

(3) M. E. Nightengale, "The Value of Statement," Naval Research Logistics Quarterly 17 (December 1970): 507-514.

## Excerpts from the Group Reports and Discussion

We discussed three things: circulation, services, and security.

Basically, we were just identifying things that people wanted to survey with circulation, with the understanding that the major goal is to have materials available.

We discussed user attitudes about the library - How do we find out what these are? How many varieties or types of users do we have in a particular academic setting?

What do the users find when they get to the library? In some department stores the buyer finds every variety of ad to direct him where he wants to go - signs, marketing techniques, etc.

To improve services, we have to begin where the users are.

We discussed library staffing. It is not so much the number or kind, but the attitudes of the staff. This brings us back to what the user brings to the library. We don't have the expertise to do some of the sophisticated kinds of sampling and studies, but we might complement the expertise on our own staff with competencies of faculty members who work with us.

It was agreed that enrollment, size of library staff and student characteristics such as background preparations have a lot to do with anticipating needs of users.

We talked about surveys that a couple of libraries in the group had already made and about what types of questions were asked. One questionnaire was adapted from a grant proposal--for students and faculty--and asked that you check off services that you wanted to know more about. Students were cooperative and the response was good, but it was believed that the questionnaire was too long.

Dr. Miller: Sometimes people "bad mouth" the whole idea of surveys. One of the biases built into any survey is the fact that the responses you get are from the people who are interested enough to respond. Probably you will get about the equal number of biases pro and con. Some of this might be washed out of a survey by making it clear to the respondents what the objectives are. One of the problems with the original survey was that you had some preconceived ideas of what you wanted back. I am not too sure this is a good idea in that they will be ready to accept those particular responses that will be embarrassing.

Two groups suggested the idea of security. What is the real objective of security from the standpoint of the user?

Participant: To insure the availability of materials that you claim to have.

Dr. Miller: You probably run into people who say they would like to have such and such a book. Then you ask if they have checked the card catalog. Sometimes they don't know how to use the card catalog. They see it as a barrier that some librarian has devised to keep them away from the materials they want. Security is sometimes frustrating rather than satisfying to the user.

Participant: Then there is the question of physical security of the individual. The image of the library when people are afraid to go into the stacks is another problem.

Dr. Miller: When the new library was built in Tulsa there were three doors to go in and out but none of the three was near the circulation desk. We did an analysis on the cost of putting guards on the doors because materials were missing. But the director thought that if we had guards on the doors it would indicate to library users that they were not trusted. To me this was a trade off. What image do you want in the library? From the standpoint of an individual going back into the stacks and being accosted by a deviant - if there are too many guards, you may imply that you do not trust anyone. A balance has to be maintained. How to reach it depends on the library itself. These things can be done in a very unobstrusive way; better lighting for example. As far as determining what the user needs from the standpoint of security, security of materials and all aspects of the library operation, you have to be very careful of what you do in response to this because the final problem may be worse than the first one.

Participant: I would like to stress that many faculty and students, graduate students especially, may be looking for a topic to investigate. Even though the library at Purdue was unable to use the study made there, it was none the less exceedingly valuable. At Cornell they advertised among the faculty and graduate students that the library was willing to serve as a laboratory for research. Theses were done on cost accounting systems, and organizational development; on problems in space development and one thesis was written by a geographer applying geographic principles of ways to find the library. We used this thesis to change signs in the library. Engineers studied materials flow; people from the school of industrial labor relations and a psychologist worked with us. If you make it known to teaching faculty that you want to be used as a laboratory, you will find a lot of people who need to be reminded that you are a system and then they can see you as a laboratory in their discipline.

Dr. Miller: Sometimes it helps you to see how other people misunderstand your organization. The University of Indiana library school has a good research group. What relationship does that library school entity have with the university library?

Dr. Kaser: Not so much with the university library - the research institute provides a lot of employment and research opportunities for many of our doctoral students and masters students, but it does not have so much of a relationship with the university library.

Dr. Miller: The reason I asked is that in my own situation in Missouri, sometimes for example, in the university library they get a little bit hostile toward some of our students who are coming over and contemplating the librarians in the system. This can be a problem, but we have this group of people who need research studies. It isn't going to cost you anything. Would you give us an idea of what you would like to know about the library. Then we'll see what we can do about putting together teams to come over and do the study. I think this is the sort of environment, kind of healthy interchange of ideas, that can be very valuable. I think this is true of many institutions. You are not going to satisfy user needs in any organization unless you have internal communication.

In one library a time and motion study was done for the library by students in the industrial engineering department. The problem was that library staff members resented the graduate students standing around with stop watches. There should have been more liaison with the staff instead of just sending the graduate students in there.

# Environmental Psychology: Factors in Library Environments

Dr. William H. Ittelson

I have, perhaps, one great advantage over the rest of you in speaking here today, and that is that I really don't know anything about libraries. I should make that quite explicit right at the start. So, I expect to learn a great deal more from you than you could possibly learn from me. I do know something about environmental psychology, however, and that is what I will try to talk about and hope that, as we go along, we will develop some specific relevance of that general topic to your particular interests.

Environmental psychology is a new field. Of course, we are accustomed to new fields cropping up practically every day, but it is somewhat surprising that the social sciences in general and psychology in particular have discovered the environment so recently. The term "environmental psychology", as nearly as I can tell, was first used a quite recently. The first place I found it referenced is in 1964. Some German friends of mine in the field point out that a German writer used the term around the turn of the century, but that is typical of what one encounters. Not long ago, when I started my bibliographical work in the field of perception, I discovered that whenever anyone thought of doing something new some German had already done it in the 19th century.

However, environmental psychology, as we know it today, is a new field and it is pretty much a North American invention. I believe its origins are actually in Canada. Environmental psychology is more than just an area of psychology; it is really a new way of thinking about the relationship between people and their environments. It is a new way of thinking, rather than just a new content area. It has very important implications.

My own historical belief is that the contemporary environmental psychology began about 25 years ago this year, and dates to the publication in 1958 of the paper by Humphrey Osmond on function in psychiatric wards. In any event, I like to think that the work of Osmond and Izumi and Bob Sommer in Saskatchewan marks the beginning of the contemporary interest in this field.

This work was done in institutional settings, specifically, psychiatric settings. Humphrey Osmond, a psychiatrist and director of the hospital in Saskatchewan, was quite impressed by the fact that the design of the hospital, if it did anything, contributed to making the illness of a patient worse. He felt that something ought to be done about it. Humphrey was excellent in coining memorable phrases and, in this paper, he coined two words which have become land marks in the field: sociofugal and sociopetal space. By this, he meant spaces that either tend to draw people together socially or pull them apart socially.

Humphrey felt that the design of the hospital where he was director, and most hospitals at that time, tended to pull people apart socially. Since most of the problems of psychiatric patients can, in one way or another, be reflected in problems of social interaction, it was quite clear that physical design, which discouraged social interaction, made it more difficult, was undesirable.

For those of you who are interested in history, we know that ideas tend not to be generated in only one place. More or less concurrently and, as far as I know, independently of Osmond, there was a very interesting World Health Organization paper by Davies on psychiatric hospital design. It is interesting that in both of these cases we had a collaboration between a psychiatrist and an architect. Thus, people concerned with human behavior as a scientific or practical problem and people with the design of environments as their field of specialization started working together to design environments that would meet the particular needs of individuals. This happened to be in psychiatric settings, but it could have started anywhere. Of course, today, it has spread to all sorts of settings.

It might be worthwhile to look at the way people consider the role of the physical environment, whether the built or the natural, and perhaps get into some discussion as to whether that is a valid distinction of the role of the environment in human behavior.

There are basicallly two approaches. One said the environment didn't make any difference at all. This was probably the standard approach in most social sciences. For two reasons: (1) If the environment made a difference, it was considered to be the social environment and, of course, psychology has been accused from time to time of being overly environmental. By "psychology" I am including all aspects of the study of human behavior, including psychiatry.

Being overly environmental, the development of a child, for example, was considered by some to be exclusively a product of the environmental influences, but they were thinking entirely of the social environment. This is the family, peer groups, etc.

Another view which contributed to the feeling that the physical environment didn't make any difference in human behavior was the concept of adaptation. This is something that is extremely interesting, and an important point for us to bear in mind. It is certainly true that human beings adapt to an incredible variety of circumstances, and it is tempting to think that since we are so adaptive, perhaps it doesn't make any difference what kinds of environments we provide because people will get along in them anyway. It is certainly true that some great works of art have been painted in cold and miserable attics by relatively starving artists. It is also true that some great philosophical and political books have been written in jail. Of course, we can never know whether they would have been better, or perhaps not produced at all, had the circumstances been different. I don't happen to know anybody at the moment who is writing a book in jail, but I do know some artists who are relatively starving and none of them seems to feel that that contributed notably to their profession. The adaptation notion that we do not have to worry about environments because of our ability to adapt is pretty much laid to rest by the writings of Dubos. It is true that we can adapt to a great many circumstances, however it is always done at a price. The price is frequently not worth paying, or it at least detracts from the total product. So the idea that we can adapt to any environment and get along adequately has pretty much disappeared, or at least lost its theoretical validity.

The other approach is exactly the opposite. That is what we call environmental determinism. Environmental determinism, until recently, was the darling of the environmental designers. It's nice, if you are designing an environment, to think that it makes a great deal of difference. The extreme difference, of course, is that the environment determines everything that goes on in it. It is quite possible to find many examples of this notion of environmental determinism. It is not limited to environmental designers; some architects have made extreme statements. A man, whom I consider to be one of the great architects of our time, stated that he could design a house that would guarantee a divorce. That is an extreme statement of environmental determinism. He didn't care how much the people liked each other, or how well they were suited. He felt that he could design a house that would guarantee that they would separate.

Environmental determinism also was very popular in the social sciences around the twenties. There was also a great deal of interest in geographic determinism, that is the idea that different geographic features produced different kinds of cultures and people as a necessary consequence of the environment. One of the leading geographic determinists worked at Yale. There is a famous joke that he discovered that the ideal climate for the development of creative intellect happened to be that of New Haven, Connecticut.

These two views, opposite though they are, are both very appealing because they are simple. Environment makes all the difference or it makes no difference. Once you have taken a position, you don't have to worry too much. Unfortunately, the situation is that the role of the environment is much more complicated than that. Much of what we are doing today, and have been doing for the last twenty years, is devoted to, first of all, finding out what we mean by environment, the definition of the environment; and secondly, the role of that environment in human behavior.

This gets us back to Humphry Osmond. In that paper, Osmond makes essentially two points which have become the focal points of work in this field. One has to do with the role of the environment and behavior. He doesn't put it this way, this is my interpretation of what he said: denying both determinism and infinite adaptation, he essentially says what the environment does is facilitate certain kinds of behavior. That is, the environment can make certain kinds of behavior either more or less probable and this has been one of the key ideas behind the last twenty years of work. You can't design an environment that will determine a particular kind of behavior, but we can design environments which will make desirable behavior more likely to occur, and unwanted behavior less likely to occur. So, the concept of environmental facilitation is one of the ideas that we can talk about.

The other point that Osmond made, which also has become central in our thinking, is that, as a psychological stimulus, we have to consider the entire, full, large-scale, total environment. This may seem fairly obvious to non-psychologists, but psychologists like to talk about stimuli as discreet, easily manipulable, nicely definable, bits of energy. A psychologist is terribly happy if he can do a study with a point of light in a totally dark room. That's really nice, because we can control everything. That point of light in a totally dark room is probably an irrelevant situation, for anything that you people out there do is overlooked in favor of the ability to control the stimulus. Psychologists are terribly unhappy when we say that we have to consider everything around you. If I can't define it, I can't describe it, I can't control it, I can't reproduce it exactly, then, I don't like it. I would rather go back to my laboratory with my point of light. But we know we can't do that, so the other big area of work is environmental perception.

The original work on environmental facilitation was in psychiatric hospitals. My own early work was in that area, so let me give you a specific example from my own experience of how one can get at the role of a particular kind of environment and how it can facilitate a particular kind of behavior.

One of the design problems in building psychiatric hospitals is a very simple one. How many patients should be in a room? We all know that we have private rooms, double rooms, three, four, eight, ten, twenty, and as many you want to put in a room. What is the proper number? That is a very, very crucial design problem. The architect really can't do a thing until you tell him the answer to that.

Until fairly recently, the answer to this question was reached more or less on an intuitive basis. The answer that I got when I went around and asked hospital directors how many people they thought should be in a room was something like this: "It makes a difference; some people need to be in private rooms because they need to be secluded. On the other hand, the private room does not make for social interaction between patients; therefore, some sort of enforced social interaction is probably desirable, which you get in a double room and perhaps more in a four person room." It was generally agreed that three people rooms are bad because two would always gang up on the third one. But four was all right; it was generally agreed that more than four was undesirable except in places where the budget seemed to be the most important item and, in those cases, dormitories of twenty were acceptable.

You have to be able to tell what the patient needs, in order to make a room assignment and it turned out that there was no real way of knowing whether a particular patient should have been in one room or another except in some extreme cases. This situation has changed somewhat; there are many empty psychiatric beds now. But at that time the realistic way of assigning a patient to a bed was to give him the next available bed.

But we didn't know whether our view of the role of the number of patients in a room was correct or not. We felt we should look at the social interactions involved in terms of how many patients were in a room. What we found was that the common sense notion that the more people you had crammed together in a room, the more social interaction you would necessarily bring out, was simply not true. It worked exactly the other way around. This has been fairly well documented in a number of cases. And over and over again, there is shown to be a direct linear relationship. The most social interaction is accounted for by patients in single rooms. When you get into a dormitory with twenty people, you find almost no social interaction.

Participant: "Do you find conflict rather than social interaction?"

Dr. Ittelson: The findings in psychiatric hospitals today are so masked by the use of drugs that you rarely find conflict. Personnel used to control conflict by the use of straight jackets, now they disallow it by the use of drugs. However, conflict is a form of social interaction. Mostly what you discover is withdrawal. If you go into a twenty bed ward, you find most of the people sacked out on their beds.

I am not offering that as a great finding, but as one thing that one can do quite easily to question generally accepted assumptions and also to raise questions as to why this should be true. We developed an explanatory system; it has to do with the notion of choice. The patient who has a private room has a greater range of choices open to him or her. The more people you put in, the more restricted the range of choices becomes, because of the greater social pressure. It tends to go down to the lowest common denominator, so that if you have twenty people in a room, or four people in a room, and one of them wants to go to sleep or lie down, that tends to restrict the range of what the other people are free to do.

Participant: "You are speaking of this in terms of hospitals. Theoretically, then, let's assume that we had a library where you had eight chairs around a table and individuals who come into that library, because of their own nature, would prefer sitting by themselves, rather than invading other people sitting there."

Dr. Ittelson: Well, first of all, that particular question puts me in a terrible spot because we have the world's greatest authority on that topic sitting in the room, and he will talk this afternoon. I hesitate to give a specific answer in his presence; although, if he weren't here, I'd be delighted. However, generally speaking, I think what you are saying is very true. We can look at these assumptions we make, for example, a big table is the way to go, and examine them factually. What actually happens at a large table? Then when we know what happens, we will be able to more readily assess our assumptions to see whether we are going in the right or the wrong direction. I would say that your point is correct. What happens at a large table isn't what we want to happen for much the same reason as the assumption about the number of patients in a hospital room was wrong. Simply find out what is going on, and attempt to be purely descriptive. Examine a physical setting that you hypothesize is going to facilitate certain kinds of behavior and see if it does. It it does not, what kinds of behavior do occur? We have techniques which we can get into in detail later for observing and describing behaviors in particular settings and relating the behavior to the setting. Therefore, I think one of the very specific things that can be done in the library where you have a question is simply to describe what goes on. Observe and find out. Dispel the myths.

Participant: "I want to know how you can make the statement that there is more social interaction in the private room."

Dr. Ittelson: A private room sort of implies that you can't do it. Unfortunately, I used the term private, but it should be single occupant because in a psychiatric hospital there are no private rooms. Some say, if the door is closed, you don't open it. However, many of those rooms have peep holes, so what we did was go around and observe patients. They are quite accustomed to having people walk in on them, as anybody who has ever had the experience of being in hospital will remember. The minute you enter the institution, you cease to be a person. In any event, we just walked around and looked in every space. This is one of the techniques one can use, a time sampling observation procedure in which you randomly select the time, then observe and record what is going on in every physical space. In a hospital with private rooms, or any other kind of rooms, that involves just looking into the room. It raises methodological problems as to whether your presence as an observer interferes with the activity, but those are technical issues which we have ways of getting around.

Incidentally, we are doing a study now on homes for the elderly. In this particular case, the residents do have private rooms and, if the door is closed, we don't record what goes on behind that door; we record "door closed." This makes it a nasty experimental problem.

Social interaction is very objectively defined as observable interaction between two individuals. A patient in a private room doesn't necessarily mean the patient is the only person in there. Remember, we are talking about psychiatric patients, not bedridden patients. A psychiatric patient is able to move around and can choose to be in the room, in the hall, or in one of the social areas, or can choose to invite people into his room.

How can you make sure that the presence of the technical observer doesn't affect what you are observing? Observing, as a technical problem in psychiatric hospitals, is relatively simple, because the rooms are not huge, palatial suites. They tend to be quite small. I think it was Humphrey who claimed that the ideal size to make a hospital room was just under the legal minimum for two, because as soon as it reached the legal minimum for two beds, directors put in two beds. You don't have to go in; just walk down the hall, and if the door is open, you look in.

Another important area of related work in environmental psychology is the way people space themselves with regard to each other and with regard to the physical environments. The work of Edward Hall on proxemics is important, as is the work of Bob Sommer on personal space. I won't go into that at all, as he will speak later, but related to this area is the question of privacy and I think we should say a few words about it.

Privacy is an extremely interesting and important topic today. For various reasons that I don't understand, it has been largely neglected by the social sciences until recently. There's is a set of terms that go together: territoriality, personal space, privacy, and crowding. Now whether they belong together is not clear, but they tend to be discussed together. The problems of crowding I will deal with separately. The question of privacy is relevant to the library. Privacy is obviously an environmentally related issue, but exactly how it is related to the environment is by no means clear.

A political scientist named Weston defined four kinds of privacy. It is important for us to realize that privacy is not a single, unitary concept. Weston talks about solitude and being alone, and that is what most of us think about in terms of privacy. Being alone: what does that mean in terms of not being seen, but being heard; not being heard, but being seen? What does being alone mean?

Another form that Weston talks about is intimacy in which privacy involves being with somebody else. Perhaps with one other person or perhaps with many people. But in an intimate relationship, again a group of two or more being separated one way or another from others. The third form of privacy that Weston talks about is anonymity, that is, the ability to be anonymous, not to be known as an individual. You can be anonymous in a large crowd, which is sort of the opposite of privacy. Many people find this to be the attraction of the large city. They can be lost in the crowd. They can do what they want and not be known for it. In the library, you can read any book you want and you have the right not to let everybody know that you've have read that book. In some cases, this may be a trivial matter, but in other situations it may be important.

The notion of anonymity as an environmentally related concept of privacy was brought home to me not so long ago when I was still working in New York. Some of you may have had the pleasure of visiting the Graduate Center of the City University of New York. It is located on 42nd Street right across from the New York Public Library. It is a very nice place; there's Bryant Park, and the Public Library. One block down, as you go to the subway, you've got a different situation. You run the gauntlet of what have come to be euphemistically known as adult book stores, movie houses, massage parlors, and all the other paraphernalia of modern society. I went down this street every day to the subway. One day, walking down the street, passing one of the adult book stores, I realized there was a movie camera set up on the street photographing everybody coming in and out of the store. It was for a local TV news program. They were doing something on pornography in Times Square and there I was walking right by the camera. I realized that it was quite possible that I might be on TV that night. So, my anonymity was shattered.

The last kind of privacy which Weston talks about, he calls reserve. This is more the political scientist than the psychologist talking. The fact is that everybody has some aspect of himself that he wants to reserve, not to be known. Even the most intimate person can never know everything about you. Certainly there is reserve in the sense that there are many things that we do that are known to a small circle, but which we don't want the general public to know. This is where you get into the whole area of electronic eavesdropping and data banks, where reserve - the fact that we can keep things about ourselves to ourselves - is being lost.

There have been a lot of attempts to deal with this concept of privacy and it is, at the moment, mostly being dealt with in terms of control of communications. All of these privacy notions have something to do with the ability to control or select what other people will know and not know about us. If the role of the environment is to enable us to control this selection, it is very important. Environmental design then gets into the issue of privacy because environment is very important in the kinds of communication that pass back and forth.

Crowding, I assume, is not a problem in the library, but it is one of the major environmental issues that are being studied, particularly in terms of health aspects. Just by way of a general note, the more we study crowding, the less we know about it.

I'm sure you are all familiar with the fascinating work of Calhoun on animal crowding. The concept of "behavioral sinks", where, if you crowd mice too much, they lose their normal behavior patterns. Are you familiar with Calhoun's "death squared" study? It is quite a fascinating study in which he put two pairs of mice in a cage that was ideally suited for mice; all he did was keep it clean and sanitary, and provide food, water and bedding. What happened was that the population increased, and increased and increased till it reached a point; then there were abnormalities of behavior. Finally, the population levelled off, then started going down. Many of the abnormalities had to do with social interaction and sexual behavior. The thing that was so exciting about this, and I'm sure this has nothing to do with libraries, was that the population started to go down. The general notion was, prior to Calhoun, that when you had that kind of situation, the population would reach some kind of optimum that was best for that particular environment and level off. There are natural examples. But the population in the experiment went down and down. Finally Calhoun realized that all the remaining population were past sexual maturity and there was no place for that population to go except to extinction. And that indeed is what happened. Calhoun didn't let the last animal die. He tried to intervene when there were 8 or 10 left, to see if he could do something, but it was too late. Then he wrote an extremely brilliant article which he called "Death Squared". The death squared referring to, first, the death of the spirit and then death of the body. Spirit meaning that they lost their essential characteristics as mice and became something else. Unless you have to lock your library doors and watch what happens inside, that is not particularly relevant, but it is extremely interesting.

Participant: "Wasn't that similar to the experience with the Boeing 747, with 350 people in one big auditorium?"

Dr. Ittelson: I don't think that is the same thing. We have to be awfully careful when we generalize from animal studies.

I'd like to talk briefly about a couple of points here; one is housing, that is living places. I will mention two issues that have arisen. One is the concept of personalization of space. I have a feeling it is relevant to libraries. The importance to the individual of being able to "personalize" a particular space that he is living or working in is the issue. This is contrary to some of the assumptions of various designers and administrators. There was a time when the designers, particularly of office buildings, felt that they had the sole key to the world of beauty, and they could design a building which was just right and, therefore, shouldn't be touched. There are examples of office buildings in which the people were not allowed to touch anything. The reason they were not allowed to touch anything was very simple: it was a perfect work of art. You don't go to a Michelangelo and chip off a piece of the marble. Therefore, you don't go into the Ford Foundation building or the CBS building and move the desks.

The problem with that turned out to be that people wouldn't live that way. All of these places were the occasion of non-violent, but very vicious battles between the people working there and those who were trying to keep the place from reflecting individual preferences. In the City University of New York Graduate Center that I referred to earlier, there was a person in charge of the design and aesthetics of the place who had that approach. When I walked into my office the first day I was in that building, I had a desk that was lined up parallel to the wall. I didn't like that, it didn't feel right; I wanted it to be at an angle. So, I moved my desk. It wasn't easy to do - it was a heavy desk because I was fairly high in status. Not quite high enough to have a wood top. So, I moved the desk. I came back the next day and the desk was neatly lined up by the wall, so I moved it again. This silent battle went on for a long, long time, with nobody saying anything until one day I came in and the desk was still at an angle and that was where it remained.

It has been well demonstrated in housing and offices, in nursing homes, wherever people live or work, that we have a very strong need to put our personal stamp on the space we work in. The personal stamp can be very, very different. There is no way of generalizing what it will be. In my own particular case, in addition to having a desk at an angle, I take every paper within a 50 mile radius and pile it on top of my desk. If I don't have papers at least that high, I am not comfortable. Other people don't feel comfortable with that. They prefer to have the desk clear. In some studies in extreme environments, researchers have found the same thing; in housing in Alaska, extreme cold, in housing in extreme hot areas, in Australia in the outback, in Iran in the middle East, where you have extreme conditions and people spend a great deal of time in their houses, the problem of personalization becomes even more important. The house that people like the most is one with blank walls. Designers don't like to provide people with blank walls, because there is nothing beautiful, aesthetically, about blank white walls. The people like it because that is the best way for them to hang things. It makes a place a home. To go to these houses, let's say in the outback in Australia, you find collections of everything, from fishing rods, to spears, and to tools up on the wall. These things say, "This is my place. You look outside and there is nothing but 120 degree misery, but in here is my place." Again, I suspect that this may be an issue in the library where people have their own study areas and like to personalize their little space. Where you have a study area like that you use over an extended period of time, the ability to personalize it, to make yourself feel comfortable, is probably quite important.

Participant: "A lot of graduate students return to the same reading room day after day. It is a real ritual in the morning when they lay out a pad and pencil in the same way and God forbid, they should be late and someone else should be sitting in that seat."

Dr. Ittelson: The same thing, to a somewhat lesser extent, has been noted in seating patterns. Some people get terribly upset if someone is in their seat.

I am involved right now in a very interesting project, building underground housing. The reason we are going to underground housing is for energy. If you go into the desert (what we euphemistically call the sun belt, which means it is too damn hot to go outside) it really doesn't make much sense to build a box on top of the ground and air condition it. But if you go under the ground, you don't have to do that. You have a relatively constant temperature. From a purely engineering point of view, it makes sense to go under ground. Then the question of windows arises.

There have been a lot of studies on windows. None of them is conclusive. But the best generalization at the moment is that where people live or do individual kinds of work, windows seem to be terribly important. That's for home and for offices. On the other hand, in many kinds of activities, people seem unaware of the presence or absence of windows. Theaters are the best example, where windows are just a nuisance. Department stores discovered long ago that people didn't miss windows. So when we build department stores at shopping centers now, we don't put windows in them. And nobody goes into that space and says, "I can't stand it in here." So the role of the window seems to be very closely related to the activity that is going on. I don't recall any windowless library studies, but my guess is that the role of the window in the library would not be terribly important.

Windowless offices are generally disliked. One nice thing about psychology is that if 51% of the people do something, we can make a categorical statement. Sometimes it is less than that. But by and large, if you want people to be satisfied, don't provide them with windowless offices. I have an architect friend in Tucson who is designing a study for another friend of mine. This fellow is driving the architect mad because he wants a room which, when he is working or writing, can be totally blocked off, so he will have absolutely no view; no visual, auditory, any kind of other contact with the outside world. When he is not working, he wants to be able to see the view and hear the birds tweet. This is quite an architectural challenge.

Windowless offices have been conclusively shown to be undesirable. There really aren't any studies of windowless homes, but underground houses always have windows. That sounds like a contradiction in terms, but an underground house doesn't mean that you dig a hole and drop into it. Most underground houses have at least an underground courtyard with window space in that. So windowless offices in the library, I would think, are undesirable. But windowless work spaces? I just don't know. That would have to be studied. It could be done easily.

I talked about the facilitation of behavior, the making of certain behavior more likely to occur. I would just like to say one last word on that. There are limitations to what one can do in terms of changing behavior patterns through design. There are obvious limitations. One of the more subtle ones we came across in some of our studies, we labelled, for lack of a better term, "Conservation of Behavior." It is quite possible to make situations in which certain kinds of behavior are not likely to occur, but that doesn't mean that they won't occur somewhere else. There is a tendency for behavior patterns to be maintained, and if we get rid of a part of a pattern in one place, it is likely to show up somewhere else.

I think, again, in the library that is probably something that needs to be borne in mind. If you have areas in which people are encouraged, for example, to be quiet and non-social, that doesn't mean that you have created quiet and non-social people. They are going to talk and engage in social activities somewhere. I don't know exactly what the solution to this is, but you are not eliminating the kind of behavior - simply displacing it from one place to another. In designing large scale environments, we have to recognize that there are behaviors that are going to occur.

I am not going to any length about environmental perception, but I would like to mention one aspect of it, which is the "meaning" of a particular setting, or the "image" of that setting. I don't know of any studies on the meaning of the library, but I think it would be an interesting and worthwhile thing to do. There are some very interesting studies, for example, on the meaning of "home". What does a home mean to people? We all have homes. The meaning of that concept is very important in understanding how we react, how we live, and also how "home" should be designed. It is a multi-faceted notion.

One of the things that is interesting is that there are six or seven discreet kinds of meanings. The home as a focus of social activity is one primary meaning of the home. The home is a place where you can go when the rest of the world is down on you. Where you can always find safety. The home, as in Carl Sandberg's terms, is where, when you come back, they have to take you in. The home is a starting place for activity, where you start and do things. The center from which activity is spread out. All of these are important meanings of home.

The least significant meaning of "home" for people has to do with the physical setting. A home as a building. It is important, but in terms of grading, that is the least important aspect. I think it would be very interesting to do studies on both users of libraries and workers in libraries. I think that would probably have significance and value in terms of the design of the library, particularly because of the rapidly changing kinds of functions; what aspects of the meaning ought to be preserved and what aspects ought not to. Some aspects may not be able to be preserved. The image of a library as holding a nice book in your hand, in attractive print, may be a thing of the past. Soon we may be holding computer controls in our hands and looking at CRT displays. I am simply suggesting that the building does relate to the meaning and the image of the environment and we might want to find out which meanings we want to enforce and which we don't.

I would like to suggest at least three specific things that we might do in the library, using the tools and the ideas of environmental psychology. I have already mentioned one and I will go back to it. It is the descriptive study of what is actually going on in areas that we are interested in, either because it is a problem area, or because we are going to do something to it. It is a straight-forward problem to do a study on your own. You don't have to go out and hire fancy consultants to do it for you, simply to find out what is actually going on. There are simple behavioral procedures. You can get somebody to sit in that area and record who is doing what and where. You can very easily get a picture of what is really happening, as opposed to impressionistic ideas.

Observationally, the simplest thing to do is map the behaviors, record their places. You will end up with figuratively, not literally, a map that tells you where an activity is going on and when. On the basis of that, you then have information that you can use to either introduce changes or not introduces changes. That is rather superficial, but the details are straightforward.

Another thing you can do is use the behavior settings approach that Roger Barker developed. His observational procedure has recently been developed into a questionnaire which makes it a lot easier. The particular value of this, I think, is the notion that particular kinds of behavior occur in particular physical settings. The setting and the behavior sort of make a unit and the kind of analysis that would be of value here in the library is the idea of overlap of penetration. There are simple techniques to which I can refer you to find out if two kinds of behavior settings interfere with each other. Sometimes when you have a problem, it turns out that two things are bumping into each other. To take a very simple and obvious example, in an office two secretaries were occupying the same area. One secretary signed out equipment and the other performed regular secretarial work. They were both secretarial activities, but in terms of the behaviors that were involved, they were quite different. It turned out that they were physically interfering with each other. The solution was very simple: move one of the secretaries just a little bit away, so you had a physical barrier. Sometimes it can be a lot more complex than that. But, I think in the library you may have a number of cases where you do have settings that overlap with each other. One setting is for individual, quiet study and another involves some kind of group participation. If these physically, or in any other way, overlap with each other, you've got trouble.

The second place where I think it can be very interesting and helpful to introduce some of the environmental psychological procedures, has to do with the introduction of change. Libraries are like everything else in our society, they are changing rapidly. You are constantly being faced with the need to introduce new procedures. How can environmental psychology help you with that? One thing we can do, again, is study. The introduction of change is a very complicated process. We can't tell you very much about how to do it, but we can tell you how to study it to see what's happening.

One of the things I would suggest is that if you introduce some kind of change, that you do a longitudinal study, even if it is just record keeping, to see how the natural history of that situation develops. One of the great fallacies, I think, in looking at environmental facts on behavior, is to take a single moment in time and say, "This is the environment, and this is the way people act, and therefore, we have this relationship." We always have a natural history and you have to understand the situation in terms of it. So, introduce a change and then observe what happens over a period of time. If the situation is such that you feel it requires some intervention, if things aren't working out quite right, you have a picture of why and how they got that way. Knowing how they got that way, you can do something about changing them.

Let me give you a simple example from our own experience. It has to do with the children's hospital. The philosophy of this children's psychiatric hospital was that the kids should not be penned up. They should have a sense of freedom. One of the ways of giving them a sense of freedom is not to lock any doors. When that hospital was opened, there were no locked doors. The kids could go anywhere they wanted. That philosophy remained unchanged as far as the stated position of all staff members was concerned. We did a very simple thing. Once a week we would go in and walk around that hospital and try doors and simply record which were locked and which weren't. If you did that and you did a graph of the number of locked doors, over a period of time it went up and up. Finally, in no way could you describe that hospital as an open door hospital. Most of the doors were locked. If you talked to the administrator or any of the staff, they would tell you it was an open door hospital, but gradually, without anybody knowing, it had changed.

When we presented this material to the director of the hospital, he was totally taken aback, because he and nobody else on the staff had any idea that they were instituting this change. By studying the development of it, we could see exactly what had happened. Therefore, it was possible to institute changes which would go back to the open door policy that they really wanted.

I think this is a good example of showing how the natural history of the use of space is necessary in order to understand the present pattern of use. The present pattern of use did not suddenly appear and was not automatically determined by that situation, but was the development of the interrelationship between the users and the facilities available to them. I suspect that that kind of example may have a lot of relevance to the library. Sometimes we can be quite unaware of change. I would say, if you are introducing any kind of change, watch the development of the patterns of use of that change over time. It can be extremely helpful in understanding what is happening.

The last point that I would like to make is the idea of a post occupancy evaluation. This is a relatively new idea in architectural design fields. It is strange but true that we put vast amounts of money into building structures and almost nothing into assessing those structures after they are built. The idea of evaluation of a new building in terms of how it is carrying out the particular functions for which it was designed, is very new. It is easy to do. I don't know how many of you have had a new building; probably a librarian gets to do one new library in a lifetime. But, in any event, the post occupancy evaluation is fairly straightforward.

The first thing one needs to do is to find out, preferably from the architect and from people involved in the program, what the various problems were and how they were architecturally solved, what the rationale behind the various aspects of the design were. That sounds difficult, but it really isn't. Take the architect and walk through the building and simply talk about this and that. Very quickly you can get an idea about what was intended by the various building elements. Take the administrators and users of the library for a walk through the building, and fairly quickly you can develop a set of objectives and a set of solutions. Then usually by questionnaire, but sometimes by observation, you can find out how these things are working. When you have done that, you now have something that is very rare in the history of architecture - you have actually evaluated that particular solution and you have some information which can be extremely helpful, not necessarily to you (which is one reason it is not being done, because your building is up already) but very helpful to the architect who is going to design another building. Somebody said an architect gets to design one library in his life if he's lucky.

Most post-occupancy evaluation is currently being conducted in housing. Of course, a lot of different houses are built by a lot of different people, so you don't have this business of the single great monument. Here it is possible to develop a progressive refinement of not the aesthetics of it, but the function; the kinds of behaviors that different elements develop. I don't know of any full scale post occupancy evaluation of a library, but it would be extremely interesting. I doubt if any library has ever been built that didn't have problems. Therefore, if you did one, you would be able to pinpoint the source of those problems where they occur. You could determine whether they are design problems, administrative problems, or a combination of both. Or budget problems, which is where most of them come from anyway. In any event, you can find out where the problems lie and sometimes solve them for yourself. Certainly, you help the next designer in solving that particular kind of problem. The idea of a post-occupancy evaluation, if you happen to have a new library at your disposal, is extremely interesting and should be performed over time, since you have the development of patterns to consider.

Let me give one last example, which I meant to include earlier. It is a study that we did at Tucson. There are two libraries at the University of Arizona, a main library which has just opened, and a science library. We did a simple study on the outside of the library and what the approach to the library meant in terms of the use and meaning. It was quite revealing. The science library at night was dark, poorly lit, with no good approach to it. It just sort of emerged out of the darkness. It was kind of a frightening place, the kind of place you had to go through the dark forest to get to. You only went there if you really had to. The inside was quite inviting - but the approach was not. We discovered that at night, people simply didn't go there because they didn't like the approach to it. Whether there were real dangers or not, I don't know. I suppose every campus has its real danger these days. The approach to the new library was lighted, with nice open space; people felt comfortable, and people went to the new library. So what's happening outside is important also.

Participant: "In the beginning, you emphasized that the building should be new. How old is new? Could we begin such a post occupancy evaluation even after ten years?"

Dr. Ittelson: Sure. I suppose you could evaluate the building at any point. It is more difficult to get at the specific architectural solutions in an old building because the architect has forgotten how and why he did things. Also, there have been all sorts of changes made, but you could take it as it stands now and evaluate what is going on now. I think it is an interesting thing to do an any building.

Participant: "Is there any empirical data on the effects of color in the environment?"

Dr. Ittelson: That is one of the questions I'm sorry you asked. Obviously, color is terribly important and it is one of the things that you can search the literature through and you can't find any decent answers to it. I think color is one of the areas that desperately needs study.

Participant: "What about colored lights?"

Dr. Ittelson: I haven't gotten into that. My impression, first of all, is that it has been pretty well shown that the dead, flat lighting, such as we have in this room is undesirable; that contrast and variability in lighting is desirable. I don't know anything about colored lights; I haven't been in a place using colored lighting.

Of course, studies show that fluorescent lighting is bad. There is evidence that you had better not use fluorescents around some types of disturbed children because you exacerbate nervous problems. Every psychological study that I have read shows that we should not use fluorescents. But, try to sell that to the person who controls the budget. Fluorescents are cheaper. There is some hope on the horizon. There is a new incandescent light that is supposed to come on the market next year which is supposed to be comparable in cost to the fluorescent. I'm sure the technology is extremely complex. It has a heat, but not light, reflecting surface which reflects the heat back to the filament instead of radiating it out. It will use its own heat to heat the filament, so it uses less energy. When that is available, maybe we abandon these horrible fluorescents.

Participant: "Faber Birren makes a lot of statements about the use of color that seem to be largely unsupported."

Dr. Ittelson: Faber Birren is the self appointed guru of color, but it's all just his idea. He may be right sometimes and he may be wrong sometimes. My personal feeling is that he is probably more wrong than right. In some things he is extremely skillful in using color. But that is different from being able to intellectualize the role of color. Because he can use color, he thinks he can tell us about color. I think these are two somewhat different things.

Participant: "Furniture seems to play such a major role and I just wonder what should librarians look at as far as matching the building with the furniture to become one environment. When you buy your furniture, you are already locked in. We rely on salesmen who have the expertise to help us out in this area. They determine, to a great extent, what type of environment we are going to have, because we will have that furniture for the duration of the building."

Dr. Ittelson: All I can say to that is, go to the best expert you can find, because I am not the one. But then you are locked in to a certain extent with the furniture that your expert tells you to get. Find out what people think about it, how they are using it, how they feel about it. If there are problems, sometimes they can be easily solved, and sometimes not so easily solved.

Let me close the discussion of furniture with one anecdote. I don't know how many of you are familiar with the furniture problem at the new library at the University of Arizona. The library was built and ready, but needed a legislative appropriation to buy furniture. The president of the university said something that offended one of the key legislators and that library stood there, ready for use, but empty, for one full year, while that legislator held up the appropriation for the furniture. So if you are building a new library, don't offend your legislators.

Participant: "How do you feel about environmental psychologists being called on as building consultants?"

Dr. Ittelson: Not just environmental psychologists, but a team of people, should be called in; we are doing that right now with our new classroom building. The president of the university selected from the expertise on the campus, which is very rare; if a university needs experts, it usually will go anywhere except its own campus to find them. But, the president appointed a committee from the school of architecture, environmental psychology, interior design, landscape architecture, and one or two others. That committee has been functioning as an advisory committee on the new building. I think this may be a unique event, and it has worked out quite well. We have been specifically asked to address such problems as windows. We made a specific recommendation that there should be no windowless offices; that was a big hassle. We made recommendations on lighting; that there should not be dead level fluorescent lighting; instead there should be controllable incandescent lighting wherever possible or the fluorescent lighting should be supplemented with incandescent. Whether it will be a better or worse building, I don't know, but it will be a different building.

We made recommendations about the disposition of offices, their location with relation to each other, relation to secretarial staff and classrooms, etc. Recommendations such as not to have the offices off in no man's land, but to try to get easy access to them.

Participant: "Would you recommend the landscape office approach?"

Dr. Ittelson: I don't think I can answer that in the abstract. You have to have a more specific situation. The landscaped office was the big thing for a while. There were no partitions and you were using plants and things - those tended to be disasters. In general, the use of partitions to create space in offices has proved to be a useful thing. Whether everybody should have his own individual cubicle or whether six or eight desks should sit in an open space, you really can't answer. It depends a lot on what people are accustomed to, the kind of work, and the personalities involved. I know two architectural offices, one in which there is nothing but open space where everybody from the principal on down is in view of everybody. I know another one in which everybody has his own little place to work. These simply reflect the personalities of the principals and I don't think there is any simple answer. In general, it has been found that partitions work better than not. However, where you have 500 people doing the same kind of clerical work, there has never been a decent solution.

# PERSONAL SPACE AND FACILITIES USUAGE

Dr. Robert Sommer

I am very pleased to be here and I would like to spend a couple of seconds trying to set my talk into some perspective with Bill Ittelson's talk this morning and Nancy McAdams' talk this evening, since all three talks roughly approach different aspects of the same issue; that is, environmental programming of libraries to fit user requirements.

Bill Ittelson, this morning, gave us a perspective on environmental psychology, some of the general views, some of the research problems that have been studied the most, such as the privacy issue, the issue of crowding and also a description of some of the settings that have been studied most often. My own contribution will be to discuss, rather than the grander theories, more middle range design principles, and, more specifically, some of the behavioral research that has been done in libraries. I will discuss some methods for library research, going in a couple of steps down from where Bill left us this morning, into showing you some questionnaires, observation sheets, and some semantic differentials.

I am a Paul Goodman type decentralist; I want to give people access to tools. My notion is that librarians cannot wait around for social scientists in white coats to come down and do their research for them, particularly if they are not going to pay those people in white coats. I recognize there isn't money around to do that. So, if you want a user evaluation of libraries, there is only going to be one group of people to do it, and that's yourselves. You might as well know how to do it right. There are lousy questionnaires and there are good questionnaires. There are bad ways to do an interview and good ways of doing an interview. It is important that you learn those methods correctly.

This evening, I gather, Nancy McAdams will take us one step even further into standards and facilities specifications. That is a logical result of research on, for example, human spatial needs. Once you find out what people like to do and where they feel comfortable, you can start measuring centimeters, measuring distances, locations, and actually get into instrumentation in terms of hardware, what kind of furniture should be purchased. This is an inevitable progression from the basic studies of environmental psychology, some of which involve animals.

In fact, the earliest work on spatial needs was done with animals and there is an interesting reason for that. It was done by biologists connected with zoos. They found if they gave a zoo animal too little space, too much space, or the wrong kind of space, the animal became listless, lost its body sheen, couldn't reproduce and often died. Then they were out a $1,000 animal, or $3,000 animal. So, they embarked on lots of studies trying to define spatial needs for certain species; for example, monkeys. They have to be above you, or they become ill. Or put on your level. They need something to rub up against, something to scratch against. There are specific needs associated with each species. Here we come to some very interesting issues that Bill Ittleson alluded to: I think there are limits to human adaptability. Adaptation is possible, but at what cost?"

We not only have to see what happens - whether people can adapt to bad facilities - but what this does to them. How they avoid the place when they can. Probably the best kind of research strategy, and we're going to get into a number of them, is the one that's being used on the third floor of Sandel Library: give people a choice and then let them vote with their feet. If you have 90% carrels, you have no experiment. Actually, it turns out you do have an experiment where you have 90% carrels, 10% tables. You'll find you have 90% use of the tables and the other 10% of the people are at the carrels, which doesn't indicate a good purchase system. The issue is not that carrels are good or bad in themselves. We will discuss when and where they are useful.

Let me begin by talking about human spatial needs. I think I will go into some general principles and try to make them more specific to the library situation. Edward Hall is another of the seminal figures, along with Humphry Osmond, in the study of human spatial needs. Ed Hall is an anthropologist who was struck by the ways that people in different cultures used space. Whenever he was in another society, he would find he was standing too close to people, too far away, or saying hello too soon or too late. He had to learn these kinds of distances. Later he noticed a lot of American business people overseas; people in the state department, etc., were making these same mistakes, but weren't aware of it. They were just making other people feel uncomfortable, feeling uncomfortable themselves, and blaming everything but the environment. "It's just those people - they don't like Americans." They had nineteen excuses and the last thing they ever credited was the environment and their own use of space.

At one time Ed Hall and his wife became consultants to the state department, advising Americans going overseas on those distance mechanisms and also on time mechanisms. You know, in some cultures, if you have an appointment at two o'clock, don't come until after four. If you are expecting someone at two, maybe five, if you're lucky. All of these kinds of things are not random; they are very predictable. Each region of the country, as you know, has definite kinds of understandings. If you say for people to come to dinner at 7 o'clock, what time would they come?

Audience: "At 7:15. 7:30."

Dr. Sommer: What about a party at 9:00?

Audience: "At 9:30. 8:00, etc."

Dr. Sommer: What about a garage sale at 2:00 o'clock?

Participant: At 6:30 in the morning!

These are predictable kinds of things and are teachable as well. A lot of these kinds of principles have great relevance in library work. The library is a very interesting research center for lots of reasons that we will be going into.

Ed Hall was struck by these differences and identified four different interaction zones or ranges that people use. The closest he called "intimate distance", which is from 0 to 18 inches, that is characterized by intense sensory inputs from the other person. The close senses, smell and body heat, are very important. This zone is usually reserved for intimates. It also can result from crowding and that is very true in the library at certain times of the year. The library environment has certain cyclical rhythms which you are very well aware of, and any research in the library really has to take into account two kinds of periods: (1) peak usage time right before exams and, (2) all the rest of the time. You don't design the library solely for the peak usage time.

In fact, it may be interesting to consider doing what you do when you have a party in your house and invite 90 people. You could rearrange your reading rooms right before exams. I have never seen a library do this. I would think there would be a lot to recommend it. During the rest of the year, you can arrange things to give people maximum privacy, but there are those times when density becomes the important consideration, when you need a different balance between capacity and privacy.

I was a consultant on the seating area of the Bay Area Rapid Transit, the subway system in San Francisco, and we had the same kind of issue. In order to be successful, the BART system had to appeal to commuters. They were the ones that would give it economic vitality. In order to get those people out of their cars, you had to give them something comfortable. On the other hand, those same arrangements wouldn't work for the sardine conditions down town. So, we had to work out sort of a division of the car into two areas. One, a comfortable area where the people who ride long distances could sit, and then a stacking area where you are pretty much on your own in the rest of the car. When strangers are put in intimate distance, as in a crowded bus or lobby, they adopt all kinds of mechanisms to minimize the inconvenience and discomfort. For example, averting eye contact is very important.

In terms of library spacing, eye contact is a very interesting variable to study - how people place their eyes, what they do with their eyes. If you really want to go one step beyond simple seating position studies, consider eye contact studies. Eye position studies are another level probably requiring a little more in the way of instrumentation and technology, but certainly a feasible research issue. Strangers, when crowded, also not only avert eye contact, but their bodies become rigid and immobile. They treat each other as non-persons. If you bump into someone, you pretend it didn't happen. If you apologize to them, you acknowledge that they are people and in these conditions and you don't do that.

I feel strongly about the principle of variety of facilities. There are three cardinal principles for designing for users: one is variety, the second is flexibility, and the third is personalization. You get different aspects of those, but I think variety is exceedingly important and it is not just my view. Most of what I say results from a lot of discussions and questionnaires with library users, particularly academic library users. I feel delighted that I'm with an audience that is concerned with academic libraries. I'm in an odd position. I've talked with a number of library groups, but most of them are librarians from public libraries, while most of the research I've done has been in university libraries; so, suddenly I feel this information is actually relevant to your situation.

There are students that want to come to the library, that neutral turf, and these people, to be very honest, like body contact where they are reading. They like to sit side by side at the soda fountain. Husbands and wives sitting across from each other is more personal than sitting side by side, but if you're courting, sitting side by side gives you greater opportunities for thermal contact. One things that students want are group study rooms specifically designed for people who want to be together, study together. This includes study dates. I think it is desirable for libraries to attempt to convenience people, say a young man and young woman who want to study together, particularly if they are taking the same courses and want to share their academic concerns.

The second zone defined by Hall is probably the most significant one in the library because space is limited. It is called personal distance, it runs from about 1½ to 4 feet. It is the characteristic distance that friends, but not intimates, will use with one another. It allows good visibility to the other person, but it is not so close that one person can get his hands on another. A lot of space zones were designed with some progressive intent in mind. The three mile coastal zone was a cannon's range at one time, and now a 200 mile zone is a ballistic missile's range. A lot of space zones were related to defense and agression at some level.

The third interaction zone is social distance, which runs from 4 to 12 feet. This is generally used in impersonal encounters in offices, banks, bus stations and other public locations. People seated in library reading rooms will keep this distance if density permits. Strangers in a library, two students who come in at different times and don't know one another, will try to maintain that distance.

The further zone isn't at all significant for libraries. Public distance, for example, me here and you back there, that's the distance used for formal occasions such as lectures and public speeches where physical cues from speaker to the audience and back are minimal. Often they elevate the speaker to indicate his or her exalted position.

Those are the four different zones, each with its own different design needs. I think that librarians should be concerned about the first three. You want to design space where friends can do things together, not only intimates, but friends as well as strangers. You shouldn't design everything in the library just for strangers, but that is the usual present situation.

Another concept of human spacing is one that I have been concerned with. It is what you might call the zone around the individual, this kind of soap bubble around the person; some people call it a body buffer zone or snail shell. It is the emotionally tense zone that people regard as "their space." It is portable and is not attached to a fixed geographic location. It has invisible boundaries. You can't see the boundaries of my space, but I can sense them. And I can sense when you are getting too close.

There are important cultural differences in the size and dimensions of personal space. In general, people from Latin countries have smaller space bubbles than people from Anglo-Saxon countries. A Brazilian or Spaniard will converse at a closer distance than will someone from England or Sweden. This doesn't cause any problems until the cultures collide or unless you design your facilities for English speaking Canadian children and they are being used by French speaking Canadian children. The French want to speak at a closer distance. All kinds of problems arise when the spacing and norms that one group uses are very different from those of others who are sharing space together. Women tend to stand closer, sit closer together than men. This has come through in a number of different studies; in fact, in many different species as well. Studies in Switzerland, showing the spacing of people in elevators and other public locations, indicate, again, this closer distance of women together than men.

These rules of spacing are learned at an early age, usually as a result of parental modeling. The parents convey by raised eyebrows or voices that you are coming too close; stay further away; you are breathing on me; you are getting me dirty, or something like that. Little children use far less or smaller space zones, but these increase until about puberty where they stabilize at the adult pattern. Girls learn the rules of appropriate spacing earlier than boys, paralleling their more rapid physical and social maturation.

There has been a lot of research on spacing patterns, some of it relevant to library situations and some not. One general conclusion is that people sit and stand closer to those they like or perceive as being like them, than from people they perceive as different from them or that they dislike in some way. If I describe someone who's coming to see us as a cold individual, you probably are going to stand further away from that person than if he is described as a warm person. There have been a number of studies like this, asking people to converse with someone and if that person is described as a former drug addict or ex-mental patient, people will stand further away.

A psychologist in San Francisco "came out" a few years ago--announced his homosexuality publicly. He noticed a great difference in the way a lot of his colleagues responded to him after that. Even though many of them supported him on a verbal level, particularly his male colleagues, they would move physically further away from him, especially in the men's room. So he did a series of studies. He had students interviewed about their attitudes toward homosexuals. Sometimes the interviewer wore a "gay and proud" button and other times he was described to the interviewee as working for the association of gay psychologists. The null treatment student interviewer just wore some kind of neutral button. Usually it was a graduate student doing a thesis project and there wasn't too much difference when the interviewer and the respondent were different sexes, but when they were of the same sex, there was a huge difference between the responses to the supposedly homosexual interviewer and the straight interviewer.

People with physical handicaps often complain about other people being physically distant, although they might offer verbal sympathy. Robert Clack did some very interesting studies; he had people simulate handicaps and it was true. People did stand and sit further away from the handicapped person. The handicapped actually were isolated by people.

Size makes a difference, too, in distance. Dr. Ittelson is tall enough to have probably noticed this. We were doing a bunch of studies on peoples' comfortable distances, and when we used exceptionally tall subjects, we got all kinds of funny results. It turned out that people do stand further away when they talk with a very tall person. We found many tall people complaining about other people being distant, and that they were having a hard time relating to other people.

This brings up a whole issue of why all the chairs in a library should be the same width, height, size, when people come in different sizes and shapes. It is unfathomable to me why they all have to be identical. In fact, we have aimed for variety and rather than trying to mesh with existing tables and chairs, we have deliberately aimed to add different sorts of chairs to increase the number of options available to people. It's like right-handed chairs - left handed people don't have a good time in this culture.

One thing that we have tried to get students to do, and I think it is a very useful skill for librarians to acquire, is to "read" environments as they are used; to be able to look at a setting that is occupied and make sense out of the interaction between people and the physical setting. Here, most every seat is taken. There is very little I can say here about the arrangement that has been made. Everyone is stacked in a separate seat, no one moved a chair, no one sat behind me.

I am going to show some slides; otherwise, I would have opened those curtains when we had the talk this morning about windowless rooms. There is green grass and trees are out there. I think those curtains bring us to another interesting concept that Fred Steele has talked about. He does management consulting on the use of space. He comments on how some aspects of the environment are not physically fixed, but pseudo fixed. Fake fixed. The curtains look like they are drawn; somehow you would like to open them, but you might not be able to find the right part of it, and you would look like a fool if it didn't work. Many times, in going around to libraries, we have talked to employees who reacted as if aspects of the environment were totally fixed and nothing could be done about something which was a perfectly portable, movable thing. That includes book stacks. As you know, most aspects of the library are movable. But we often look at them as if God put them there and we have to get God's permission to move them.

We did a number of studies on people-space usage. The library is a very desirable place to do this research. I am basically a naturalist, that's always been my interest. I like to sketch out of doors, hunt for mushrooms and collect driftwood. I never liked to be in the laboratory. The last real laboratory study I did was my dissertation, I guess. I always liked to go out to find things to work on. When we were trying to do research on getting people in convalescent homes and mental hospitals to talk with one another, the kind of work that Bill was talking about, we needed some notion of what we wanted to accomplish. My attitude, then, is that when you work out the program goals, then you go out in nature to find out how they are being realized there. We had the idea that we wanted to get people talking with one another in the psychiatric hospitals and convalescent homes, so we went out and looked at the places where there was good interaction. We looked at beer parlors, lounges, and cafes. I must say we learned that our initial suppositions were dead wrong about how people arrange themselves in space.

We first had the idea that people, when they talked with one another, sat or stood directly across from each other, but that isn't true at all. If you watch people conversing, they do not stand directly across from one another. You will spook someone if you do that. They will become very anxious. We found that people stand at some kind of kittie-corner or sit at some kittie-corner angle where they can avoid eye contact when they want to. That was a very useful result for us. We had a program requirement to design space for people to interact. The method we used was to go out in the world where good interaction space occurs and try to abstract the essential ingredients of that, and then bring them back. Then we started doing field experiments; we created different kinds of arrangements and saw the effect on people.

I do want to spend quite a bit of time on research in libraries. I had a brief tour of the library just before the end of the lunch hour, and there were many things that were obvious. Most of the people we saw reading were not reading books from the collection, but were studying materials they had brought with them, or just browsing. Many of the people in the library have needs other than using the collection; they really are there to study.

We did a whole series of studies of spacing in different kinds of settings. We picked the library as a principal research setting. For one thing, it was very handy for university researchers. We have done numerous studies of seating arrangements and usage patterns and satisfaction with library facilities. One of the most significant findings of all the studies I have seen done in library settings, and there is no reason to disbelieve that this isn't a genuine finding, is that a sizable number of the students who are there are not using the collection during any particular visit. The figures are in the 80-90% range. That has a lot of implications for the design and layout and location of reading areas.

One thing it suggests is that many students would like to be able to snack when they are reading. This comes into conflict with the librarian's desire to safeguard the collection if you assume that the students are there using the collection. If the students are reading their own materials, there is really no reason why they couldn't snack. So one thing that we have been advocating - we've gotten it introduced into our own campus to a lesser degree and a nearby one to a much greater degree - was the idea of reading rooms that are outside the security perimeter of the library, with an outside entrance. They could be open 24 hours a day. Campus police walk by at 3:00 o'clock in the morning and take care of the usual problems. You arrange them so that there are no hidden areas, no danger of rape or indecent exposure. These can also be snacking areas as well. We have designed at least one of these and it works very well. The librarian doesn't worry because no books can be stolen, no books are kept there; the students can just walk in and out and don't have to go through metal detectors and have their genitals x-rayed.

Every profession has its bete noir or class of clients that people would rather not think about. Many librarians would rather not think of themselves as being in the study hall business, yet they are to a considerable degree. Even if you are a librarian down town, the high school students who come in to study are a significant portion of your clientele. If you are a university librarian, you ARE in the study hall business. You can't just sniff your nose at it. It is a big business. I know some librarians who think they are running research libraries, but that is not what they are doing. In programming a library, one should be honest about the study hall usage; some reading facilities do not have to be coordinated with the collection. It is good to have some reading stations by the collection, but you also need some just for people who want to study between classes or in the evening.

In terms of spacing arrangements, Bill Ittelson mentioned, and I think you are all aware of, the desire of many readers for privacy and how they use a level of social distance. In terms of your customary table and chair arrangement in the library, what you get are people sitting at the end positions of the table. I don't recommend six person tables. Four person tables generally give you more flexibility. If you want to combine them, you can, but there is generally better flexibility, giving more people more privacy, with four person tables. You can actually seat more people comfortably.

We did a whole host of studies showing how people seat themselves. People who get there first have the most options and you can learn the most from them. The people who come later have fewer options and you can learn less about seating preferences from those people. We did lots of observational studies, but then followed these up with interview studies asking people what they liked about the library, what they didn't like about the library, why they came there. These were discussed in a couple of articles in Library Quarterly. The main reason why people come to the university library to read and study is because it is more quiet there than anywhere else that is available to them. On the other hand, the most common complaint people have about the library is the noise and distraction. There is an interesting epistemological issue here: if you ask them why they come, it is the quiet; if you ask them what the chief problem is, it is the noise. Both of those are correct. It means they come there for the quiet, but there are still lots of problems that haven't been solved.

Carpeting is uniformly loved by library patrons. More and more studies are being done on the economics of that, and I hope that some day those figures will be so clear and unequivocal that you can get the same economy with carpeting, a higher initial acquisition cost, but a reduced maintenance cost over the long haul, so that you can get carpeting throughout libraries. In every setting that has been used in libraries, the reaction of patrons has been uniformly very positive, and librarians feel that it increases good behavior, as well as making it a more pleasant place to be.

The surveys that we have done have been kind of interesting for another reason. When we ask people what they like about the library, and this is something you can take a great amount of pride in, they almost uniformly are pleased with the library staff. They feel the staff are helpful. The complaints they have are about the physical setting or about the lack of books in the collection. Rarely have we found a place where there is terrible enmity towards the librarians.

While students study in the library because it is better than other places, the majority of studying does not take place in the library. College students study most of their time at home, in a dormitory or apartment. Interestingly enough, they do not sit bolt upright in straight back chairs. They enjoy soft, comfortable furnishings when they read. I think, if you can afford it, you should have some nice lounge chairs around. The bed in a student's dorm is the most common study place. It is far more heavily used than the straight back chair and the small desk. The library is better in terms of most every characteristic of the home for studying, except in terms of the ability to snack and relax. It won't come as a surprise that when we interview people who are studying in the library as to what is good about it, they were much more positive about the library as a study place than those people who were studying in their dorm rooms who were more interested in stretching out. There are very different personal needs.

Bill Ittleson alluded to this, this morning, in terms of kinds of space and the equality of space. We found that extroverted people did not like these little carrels at all. We found lots of people who enjoyed the tables and chairs because it helped them to study, seeing other people study. There's a fancy name - it sounds humorous - "social facilitation." Many of the courses and subjects we ask our students to study, God only knows why, are not the most exciting and interesting things. There are many requirements on my campus that I don't understand, and students really have to drag themselves to study that material. I don't consider that it is surprising that they need the sight of other people studying to get themselves in the mood to do it.

Let's come directly to the issue of carrels. I think the research on this topic is fairly clear - the studies that have been done, both interview and observation, show that there is a sizable number of students, 50% is the number in most cases, who do not prefer carrels over tables; who, in fact, prefer chairs and tables or lounge chairs I have been in place after place to do counts, and there is no basis for saying that the sizable majority of students prefer carrels over anything else. If I could give an actual recommendation, I would say no more than 50% carrels, and 40% would be better. But, I think, in all fairness, that the proponents of carrels would have to say there are good carrels and poor carrels and a lot of those on the market today are terrible. There are a number of reasons for this. One is that they are designed as a vogue item - carrels are "kicky." If you feel that "X" percentage of your things should be carrels, o.k., we'll get carrels. It is like office landscaping, or open plan school. They are a vogue item, a fashion item.

At General Electric, there are studies of lighting and they found very serious problems in some study carrels. This was one of them in Lighting Magazine, called "Better Lighting for Study Carrels." They found that most of the ones that were on the market were very poor in terms of visibility. The authors of this report indicated that their study, using a facility simulating a typical classroom, found that when they introduced carrels into the situation and placed a student in it, lighting levels in the carrel were halved. In addition, the creation of a ten to one brightness ratio between the book and the dark wood walls of the carrels reduced visual comfort. The contrast effect between the reading materials and the wood of the carrel were important. Of the 20 carrel manufacturers surveyed, 19 provided the dark finished enclosures, and 17 offered unlighted carrels. In general, lighted models did not meet IES recommendations for study activities. There is generally no coordination between the placement of carrels and the ceiling lights.

Last summer I taught a class at the University of Reno and we picked the library as our research setting. The students were very interested in the carrel situation. We did a report for the director of libraries there, Harold Morehouse, and presented some problems concerning lack of coordination between study carrels and chairs. Many of the chairs were too low for the carrels, particularly for a short person. We wondered if a different kind of chair might be preferable for the carrels. Is the same chair that is suitable for the table arrangement suitable for the carrel? I am not sure that it is. Most of the students found that the older, dark brown carrels were rather unattractive, and the contrast between books and the dark brown veneer was very disturbing. There is another very interesting thing. They had a number of the darker carrels and there were also some very nice, bright, colorful ones. Students thought that the darker ones were smaller. This is an illusion. We measured them and there was no difference in size. There were some problems with shadowing and contrast in relation to ceiling lights; there had been no coordination, so some of them directly shaded the papers the student was working on. At other times the light was located so that the student's body shaded the material.

I think when you go back to your libraries, you should look twice, not just at the carrels, but up at the ceiling. See what is happening. We would like to suggest empirical checking of the carrel locations with reference to lighting in order to minimize the problem. On this same issue, a few students questioned the need for shelves on all carrels. It was felt that the shelves created shadow problems in some cases. Some carrels without shelves would provide greater options to the users. There were many compliments directed to the bright colored chairs in the various reading areas, and their comfort as well. There was some concern at the large clusters of tables and chairs in many of the reading areas. Several students suggested there would be more privacy and it would be more pleasant if the large groupings could be divided either by green plants or by mixing of tables and stacks.

An architectural office in San Luis Obispo had one of the younger members of the firm to do a study on library carrels. Michael Fuhrer did this. He did it on a behavior design viewpoint. He examined carrels and what people did in them. Some of the things were quite interesting, like arm positions on the carrels, at the side, or in the lap; or holding up the head, and so on. The most significant position, however, was arms on the arm chair, if they were provided, at the carrels. All users of arm chairs placed their arms on the arm rests if the chairs had arm rests. I think that was a very interesting observation that he made. I think it suggested that there is a need that is not being met in chairs that don't have arm rests.

Participant: This isn't necessarily in relation to carrels, is it?

Dr. Sommer: Yes. The body position there is very different than that at a table.

Participant: Then, wouldn't you say that arm chairs would be just as well utilized at a table?

Dr. Sommer: I didn't say that. I don't know what I would say on that particular issue. That is a very interesting point. Again, in terms of our notion of variety, I think it would be very interesting to provide 20 chairs with arm rests and 20 chairs without arm rests in a given reading area, and see if there was a systematic tendency to use one rather than the other, and what kind of body positions were then used by the two groups of people. I think an empirical approach is very desirable.

Where overflow articles were placed in the carrels, what Fuhrer found was that there is a tendency to sort of take over the next carrel with your belongings. He figured out ways to discourage people from doing this. Also, users of carrels encountered considerable problems with lights. Existing lights in most areas were poor. When the user leaned over to study, his head and shoulders blocked the light surface. Users compensated for this by either leaning back when the arm chairs were available or by turning the body and leaning away from the light. Recommendation: light for the carrel should not be placed behind the user, but where the light cannot be blocked. Table legs were also a problem for a number of the carrel users. A number of the carrels in many libraries, including the one we studied, are made by taking an existing table and putting "egg carton" things on it. The people at the end, or at some point, get shafted by the table legs. So, the placement of the carrel position should be located with respect to things below as well as above.

Users of the carrels employ many body devices to increase and reinforce territorial definitions. These include turning away, arm blockage, leaning way into the carrel and sliding the chairs away. Recommendation: If carrel seats are to be situated side by side, not only should the dividers of the working surface be provided, but some extension of outward spatial definition between chairs should be made to end the need for the user to reinforce the sideward definition of personal space.

There are many kinds of carrels on the market today. There has been very little comparison of all the different kinds that are available.

Participant: In the carrels without the shelf, do you have the lighting problem?

Dr. Sommer: What you have, even with the low one, is like the office landscaping system with the partitions. You can see over it if you want, but they give you a resting place for your eyes. You know where your space is and where the other person's space is. So, psychologically, they can work as effectively as higher barriers. Without copping out, I think that if you had no money at all to do this, that the egg crate devices on tables would give you a lot. Low barriers help; I am not sure the high barriers give you that much more because of the cost of the bad light situation.

I don't know how relevant this anecdote is, but years ago we were interested in doing something about long corridors. Many buildings, libraries included, have some infinite corridors. The problem seemed to be that the eyes of people in them are drawn to the end; and there is this feeling that you don't know what is at the other end. We took a corridor and painted it in different color stripes. There was an odd perceptual illusion that occurred in that we actually increased the apparent length of the corridor. The illusion is called "filled space" versus "unfilled space." What happened, though, was when you were in it, you didn't need to look any further than the blue area, or the tan area. So we actually made people more comfortable, but in a different way than we had ever intended. I guess my point there is that it is a breach of good manners to look over the carrel, just as it is in an office to look over someone's partition. But that might make the low partitions better than the high ones. I don't see much value in debate on it. I think it could be answered empirically by putting some in.

Participant: One question that needs to be resolved is whether you consider a table with a divider panel a carrel.

Dr. Sommer: Yes, I would regard that as a carrel arrangement, but I'm not sure that we could call it a carrel. When does it stop being a table and start being a carrel? Just by way of definition, I believe the word carrel comes from carre or square. It isn't height so much as it is the square of the area. I may be wrong in the etymology of it, but if it is correct, then a low one could be considered as a carrel.

Participant: Do you think you are dealing with a different situation when you have an audiovisual carrel? If you are looking at something like a video cassette player or a film projector or a slide projector, you need the space, but suppose it is just an audio unit. Do you feel that the barrier is necessary?

Dr. Sommer: A low barrier could serve the same purpose as a high one. I, again, would use the concept of a resting place for the eyes to avoid intruding on other people's space. Theoretically, you could discipline people so they wouldn't need it, but I think that a small prop is helpful.

Participant: What you are saying, then, is that people tend not to look over that rail?

Dr. Sommer: Yes, it is like the people in the New York subways, where they just look at their newspapers, but never at each other.

Participant: How far can you go with variety?

Dr. Sommer: If you can create 19 kinds of areas but each one is separate from the others, fine; but I wouldn't want people walking through 25 different floor surfaces to get somewhere. On the other hand, I wouldn't mind 25 different reading areas around the library, each one with a different surface on it.

Participant: Have you had any experience in checking indoor/outdoor reading stations?

Dr. Sommer: Yes. There is a real preference for doing serious, intense study indoors; light study, outdoors. For people who are working on exams, outdoors there are too many distractions. We interviewed a lot of people studying outdoors and almost universally they say they never do this for serious study.

Participant: Have you had any experience testing preferences with non-seating? For example, what about people on carpet or these megaforms that some architects are putting into buildings these days?

Dr. Sommer: My own experience with the use of non-seating has been in libraries with children's areas. I have not had any experience with cushions other than in browsing areas.

Participant: I have seen an area where the carpeting was carried up on the wall and people would just lie along that area. It was a large area and very popular.

Dr. Sommer: I have seen pictures, but have not been in the Penrose Library at the University of Denver where there are carpeted geometric shapes. I have seen pictures of kids with their knees up on it, or their heads up on it, or hanging over it. I am not wholly convinced these were not posed shots. I wonder if any of you have seen them?

In Urbana Public Library they have a room about 45' x 25'. It is carpeted, but has about 8 or 9 different levels, sort of meshing together, and that is the favorite study area of the children. I see children there up to the sixth grade. This is fabulously used. They sit there reading upside down, in all kinds of funny body positions and they do it for long periods of time. You have to really shake them out of there when it is closing time.

Participant: But you don't find any college age kids sprawled around?

Dr. Sommer: No.

Participant: Couldn't they do that in college libraries?

Dr. Sommer: I think they could. In primary school design, they go much further than in college classrooms. They are much more attractive in color, texture, carpeting. College classrooms have changed less than high school classrooms which have changed less than the primary schools.

Participant: We're usually about ten years behind.

Participant: Do you favor eating and drinking in the reading area?

Dr. Sommer: No. Not in the collection proper. I have found some libraries that will allow you to eat in a reading area. For example, I visited the State University of New York at Binghamton, and they allowed the free movement while eating and smoking and anything else. It looked like a giant garbage heap after one year.

At the University of Wisconsin graduate and undergraduate libraries, there were signs on everything that said, "Please, we are sorry, but no drink, food or smoking. We can't cope with the mess."

Dr. Kaser: At Indiana University, in the library we have a full service cafeteria. There is plenty of reading space in that cafeteria and it is used heavily for reading, but there is no great pressure from the students to take food from there into the library proper I think if there were not such adequate reading areas in the cafeteria, there would be. I can't help but believe that a lot of the fears are unfounded. Students are responsible; I think we could provide more snack facilities.

The first public reading spaces in America were in the coffee houses and for 100 years they were the only public reading spaces. People could read, they could drink coffee, they could discourse with their colleagues on some topic of the day. What we subsequently did was pull the public reading rooms out and monopolize them in the library so that today there aren't really any public reading rooms, but the occasional Christian Science reading room. Librarians have monopolized the reading rooms, but we have also excluded the coffee and the discourse. Within recent years, we've begun to let the discourse back in through the development of group study rooms, and I think there is a small tendency to begin to let the coffee back in also. These three served one another very effectively. I would hate to have to do with one or two. I like all three. Notice how many of us have our cups out here. I certainly like to have a cup of coffee next to me when I read.

Participant: Have you done any studies as to how the reference desk counter, or the lack of such, influences the reference encounter?

Dr. Sommer: No, I haven't but I think somebody else is going to talk about the reference encounter tomorrow.

Participant: I was just wondering if being behind a desk is preferable to being behind a counter.

Dr. Sommer: The location of it is critical. For example, when you walk in the door of Sandel Library, there is nothing to orient you. The placement of the reference librarian should be where people can find the person and identify that person. There have been certain policy decisions about whether the people should have access to the books, or just the librarian. Whether they are the library's property or the student's property. I think a small desk, rather than a broken wall, would be highly desirable.

Participant: In some places you do see those kinds of counters, and librarians perched on stools. That way, they are more at eye level with the patron. Then again, you say people tend to talk to each other more on the side than directly facing each other. I know when I get up to talk to a patron, I tend to move more to the side than to look him square in the face. I don't like to sit behind the desk when someone comes and asks a question. I like to get up and move.

Larry Stallings: We felt, at Florida Southern, that our reference desk was too close to the circulation desk; it almost blended in with the circulation desk. By moving it, we found we got about a 20% increase in the reference questions. It also took some of the burden off the circulation staff because they were getting reference questions and then having to refer them to the reference desk. We moved the reference desk right in front of the door, so as students come in they will see it. It is on a little bit of an angle, and is labelled well, so that they know it is the reference desk. We have had quite a bit more use and we also found that by putting a chair next to it, we increased the reference interviews. Many times, the students would sit down and converse with the reference librarian and the librarian was able to elicit full information about the question, whereas, when the student was standing up, he was edgy and too anxious to move away.

Dr. Sommer: I think that solves the problem you have about people looming over you, if they can sit down for the consultation.

Participant: We just reorganized and went through quite a hullabaloo with our associate director because he wanted the central reference area that I am in to be on what we call "perches." After six months of this, I have realized that in a reference encounter with a patron, they seem not to want to come with the barrier of the desk there; consequently, we don't even have a perch. I stand up. I just wonder if there is some sort of unconscious motivation here. Are you supposed to be on eye level? Do people not like to look down at you?"

Dr. Sommer: This is a dimension of human spatial behavior that I think should be talked about, but while the horizontal one indicates social relationships, the vertical dimension indicates status: "looking down on", "looking up to." You will also find many who are uncomfortable without anything between you and them.

O.K., to wrap-up: how do you know if people say they like something, that they really like it? That it is not just because it is something new? I am not sure I regard that as a very legitimate or meaningful question. I feel that if we can get them to like things by changing them around, great. I haven't found that people like every change. A lot of changes are really terrible. Often, people are loathe to say they don't like something, and there is a tendency to positively evaluate anything connected with the library. You may have to go out of your way to ask questions that elicit negative comments. That people will use some kind of chair or carrel because it is new, doesn't bother me at all. I think you can continue studying the thing for several years like we studied student participation in a different kind of classroom arrangement, and after three years, we still find it gets a lot of discussion between students. For the first time, we got student interaction going on in class. People still like it. I wouldn't have worried about the response we got the first time, that they represented some kind of spurious effect. If students say they like something, I am willing to believe them.

## DEVIANT BEHAVIOR IN THE LIBRARY

Dr. Dale Welch (Moderator)

One of the major concerns that Dr. Larason pointed out is the face to face contact with the deviant. I have asked two people to assist me in that capacity and I will introduce them in just a moment. After they make their presentations, I think we'll take a short break and I'll come back and talk about some general problems in the library that I feel contribute to deviancy, some student reactions to deviancy, and I will also make some recommendations - ways to control deviancy in a library.

I am not a librarian. But I think I can share some of the literature in the field of criminology and the crime prevention areas to help you become more aware of the deviancy problem in your own library. Then, we will also take a look at the surveys that you filled out yesterday. I will pass the results out to you and let you see what some of the more common deviant problems are as perceived by you, and what are the problems in controlling that deviancy.

I'd like to begin by reading a statement that appeared in the Wilson Library Bulletin in June 1978. I think it says something about libraries and what has happened, or where we're going.

> "In our rush to provide something for everybody, a certain amount of permissiveness has crept in. We have attempted to make our libraries more attractive and homey places, with carpeting, trees, fountains, piped in music, lounging areas, with overstuffed sofas and bean bag chairs; sand piles and play pens for the kids; and that is nice, it is about time that we got something nice, but in so doing, we have attracted the lounge type of non-patrons who have absolutely no intent of doing anything. They consider it a great place to meet their friends. We have attempted to cast our libraries as places where the action is and now that we have obtained a piece of the action, we will have to accept those activities that are least desirable, or return to some reasonably balanced library level."

According to that particular author, we have asked for changes to make a library a more permissive place and now we don't know what to do with the problems that are before us.

The library has four atmospheres. One is the physical space. You spent a great amount of time yesterday talking about physical space. Another element is the social setting. This comes through the physical space that was talked about, and the usage of the space and interactions between patrons. You have a culture of the people who are entering the library. Many come from different classes which have different values, many come from other countries that have different values. So you have cultures entering your library. And then you have a personality of an individual entering that library as well as the personality of the staff. So you have four kinds of things interacting in a library that can contribute to and/or control deviant behavior.

For the most part, thank goodness, culture and personalities of individuals contribute to a desirable library. But deviant behavior does occur and some of it is costly; some of it is violent; some of it requires a great amount of training for the staff, which they do not usually have; some requires legal assistance, and most libraries do not have available to them the legal assistance they need. So, some of these deviants that you have contact with are going to require a punishment of some kind and others will simply require patience. You're going to have to make some fine lines as to which is which. We are past, I believe, the violence of the 1960s, the sit-ins, the syrup in the catalogs, the burning of books to attract attention, the ransacking of shelves.

First of all, this morning, let's take a look at what we can, perhaps, expect in dealing face to face with the deviant. That seems to be a very critical question in many peoples' minds. "What do I do?" The person who is going to begin the discussion of this point is Mr. Charles Poimboeuf. He's the one with the beard who, by his appearance, looks like a real, genuine deviant. He is a clinical social worker at the Monroe Mental Health Center.

Mr. Poimboeuf

Good morning. I feel rather awkward about addressing you because, first of all, I've never addressed librarians before. I don't really know what to expect. Secondly, I was kind of surprised that librarians have problems with mentally disturbed people. Dale Welch pointed out a couple of articles to me about what goes on in libraries, and apparently some real wild things are happening. I was really surprised.

I have read that libraries are magnets for mentally disturbed people and emotionally disturbed people. I don't know if you have found that to be true, but I suppose it is because libraries are warm places; comfortable, quiet, they are relatively removed from stress. Not only that, but they might offer a captive audience for the person who craves attention in that librarians are such nice people. They carry smiles with them; they are trained to be helpful, caring, tolerant public servants. In a way, maybe they are natural targets for people who have emotional or mental disturbances.

I would like to find out how many of you have witnessed mentally disturbed people in your libraries. That's a whole bunch! I would like, if you can, to separate the vandal. The vandal also may be emotionally disturbed. Just for my own purposes, I would like for you to separate that personality. I would like for you to think about another kind of mentally disturbed person, whatever that means to you. Rule out the vandal and now raise your hands. How many of you? Same number of hands. How many of you have been physically attacked in some way by mentally disturbed people?

Participant: I was involved with one mainly because I was trying to break it up. We have 300 Arab students and they brought their political problems with them. We had a fight between 2 Iranians, actually; one who was in favor of the Shah and one who was not. I heard what I thought was a clap of thunder and it was somebody being thrown against the wall. I was the only staff member in the building and had to intervene. In our student union last week, a Christian Lebanese came in and said, "Are there any Palestinians here?" Somebody stood up and said, "Yes." The guy pulled a machette and attacked him. This could easily have happened at the library. I am extremely interested in hearing about defending ourselves.

Mr. Poimboeuf: Gee, you have an exciting life.

I find it interesting that only one out of so many have witnessed a physical attack or experienced involvement in some kind of physical attack. Maybe that is significant in the sense that it is not as prevalent as we might think or fear. I think there is a difference in being the target and having to come in later to help out.

Maybe the kind of violence that goes on, that you've experienced, hasn't affected you as directly and maybe it hasn't been a severe kind of violence in relation to yourself. Maybe in relation to other people. By the way, I would like for you to raise questions at any point; disagree, make comments.

So, then, another question I have is how many of you have witnessed some kind of physical attack or abuse; with other people involved, not yourself?

Participant: I think we need a better definition - fisticuffs and stuff like that; or are you talking more along the lines of like grabbing girls, without actually bruising them. Is that what you're talking about?

Mr. Poimboeuf: Yes. Just raise your hand if you think you have. I don't want to be too specific. I just want some general idea. I would like to know what kinds of problems with mentally disturbed people you do have in your library. Some things I have run across - and I am not thinking of the vandal; the person who mutilates books, or the thief. I am thinking of something else; a different kind of mentally disturbed person: maybe talking out loud to a book, sitting on a table; rearranging the furniture, without a logical reason, weird hand gestures, like grabbing things and putting them in something; fearful behavior, like crouching under a table, hiding out in a rest room stall, huddling in a corner, that kind of thing; laughing for no apparent reason for a long time, crying uncontrollably, screaming, shouting obscenities, and then the sexual deviations, masturbating openly, exposing oneself, peeping; and hostile behavior, like flashing a knife or machete. Those are some things that I think might go on and I would like to know specifically what kinds of things you have experienced.

Participant: We had a young man who is a high school student on our campus with the National Science Foundation. He is a brilliant young man. He did a lot of strange things. One was to crawl up on a table in the documents area and announce that everybody there was going to hell, but that he was going to put them on the right track. We thought that kind of strange, but a little bit later in the day, he picked up a 16 pound sledge hammer and totally disintegrated a wall in our new education building. Then he ran back to the dormitory and told his house mother that the buildings were unsafe, that you could take them apart easily. It was very unfortunate. We felt that for the first time in his life, he had been placed with students as brilliant as he was and he was not measuring up. He couldn't take that. He ended up dismantling the padded cell down at the parish jail with his hands."

I would like for you to help us understand the difference between acceptable eccentricity, and criminal deviants.

Mr. Poimboeuf: Wait a minute, I'm curious. You're used to that kind of thing?

Participants: It's pretty common. But at what point do we have to decide when is this person going to take a sledge hammer to the walls? Is he going to go away quietly, just a harmless eccentric? I can handle that, but not a sledge hammer. And one more thing, how do we determine, if say, a girl comes up and says there is a man in the stacks exposing himself, and this little girl perhaps has just failed her first test, that she isn't doing this because she wants attention. If we blow the whistle on this man, we've ruined his life. You can murder somebody and it is more acceptable than flashing. So where do we go? We don't want the girl to be frightened; we have to protect our students. But we can't ruin a man's life either."

Mr. Poimboeuf: I will tell you what I think and then maybe we can hear some more of your thoughts. How can you tell if somebody is just eccentric or mentally disturbed? I think that is the meat of your question, and also part of your question is how do we know he is not going to escalate or become aggressive. In my experience with mentally disturbed people, generally they are not violent; they are quite harmless. Sometimes they are dangerous, but for the most part, they are harmless. How do you tell if somebody is dangerous? I think we have to use our own instincts. If somebody is loud and aggressive and we're scared to go near them, let's not press our luck. I don't think we should take any chances. If we notice in our gut we're scared to go near that guy, and I'm concerned that there are other people around him, maybe what we should be doing is moving people away from him or her. What about the girl who complains about this exhibitionist? I don't think we'll ruin him for life. I think any mentally disturbed person is probably functional. He can dress himself; he can cross the street; he can watch traffic lights; he can manage fine; he can avoid going to jail. His fate doesn't rest in your hands.

Participant: Let me make myself clear. I mean a little girl who is simply trying to get attention because she is unstable."

Mr. Poimboeuf: O. K. I would like to think that it is not your job to decide and maybe if you ask her if she wants to report it to the police, leave it to her. Let's say they do bring the guy in. I don't think it is going to be the end of his life. Let's say he has been exposing himself and he is the one who is unstable. It is not going to wreck him. I'm just saying it is not your decision. Maybe it is best if you let someone else make it. There are some things that you just have to let go in the library.

Participant: We've had really good luck with the police on cases like this. We find that they will not make an arrest on one person's unsupported testimony unless the person meets the description (as you say, these people usually have a long history) of someone who has been doing this over a period of time and around town. What they have done in our library is put plain clothes police women, dressed as students, when we've had problems this way, then the arrest is made on the police woman's or a librarian's testimony, if a librarian or the police woman has seen the person and will testify. But they very seldom do it. In fact, I don't know of any case where they've done it on unsupported testimony of a student.

"But it is important that it be reported to security so that they can add it to the list of observations and then come up with a valid conclusion, if there is one. If a girl feels her story is to be believed, then she must go and talk to the appropriate authorities.

"I think, in a lot of small to medium sized libraries, this is what happens. You are able to discern these people when they come through the door and when you leave, you tell the next staff person that Johnny is in the building and maybe you just wander around and keep track of him and eventually he leaves. But by warning each other in succeeding staff changes, you can keep these people under control and I think that, to a minor degree, in public libraries and smaller college libraries, this is what has happened. It is the unsuspecting staff member who is newly employed and hasn't had time to acclimate himself to the deviants that have been in the situation before..."

Participant: I don't much agree with that. If you've identified the individual I think we should do more than just let him wander around. I don't think we should call in the cops and let him be arrested and dragged off to prison for life, but I think we need to counsel that guy and see if we can't get him to get some help."

Participant: I don't personally feel qualified to counsel.

Mr. Poimboeuf: I would like to make this suggestion: I think what you say, you are not mental health specialists, you are not police, and you are not the court; you have a big job to do besides, and maybe one of the best things you can do is confront people about their behavior. I believe that you have a responsibility to be assertive with people who are disrupting things in the library. If somebody is making a lot of racket, for example, standing on top of the tables preaching, etc., I think you have a responsibility to be assertive, to walk up to that person and say that his behavior does not fit in with the library and that he is disturbing others. Ask him to either be quiet or leave. That sounds like a simple thing to do, but I think it takes courage.

Participant: Counseling may be too strong a word. What I meant was to point out to the fellow that his behavior is not acceptable and suggest to him that perhaps he needs help."

Participant: No. Just that his behavior is unacceptable and he's disturbing the other readers, but not that he needs help.

Mr. Poimboeuf: I think you are right. That could antagonize someone. Let's say somebody is bordering on the dangerous side; all he needs is a hair triggered; say to him, "you need help" and it might sound to him like an invasion. All of a sudden he feels attacked, so he lunges out at you and gets you by the throat.

Participant: We have a weekend visitor who always takes the reference books from the shelves and puts them on the floor. We confronted him and of course he denied it. What do you do in such a case?"

Mr. Poimboeuf: If you are pretty sure he's your man, you might have him read in public, in the open area. Tell him you have reason to believe he is the person who is doing this, and you don't feel like putting up the books after he has pulled them down, and for your own comfort, this is what you want. He might not like it, he might get angry about it, and if he does, you can ask him to leave. Who says you have to serve everybody? You are a public institution, that's sure, but I think most of your responsibility is to the legitimate patrons. If a person won't leave, then the police can be used, or the security people. You don't want this person in your library and you have a right to keep him out. If he comes in, you can call it trespassing, I suppose, and have him removed time after time. Eventually, he may get the message. What do you think about that?

Participant: I feel that he is probably harmless; however, he does provide a lot of work for us.

(Unintelligle comment.)

Mr. Poimboeuf: You know that you can control your dealings with that person, but you can't control the people around you. I don't think there is an easy answer to that one. Possibly these people who are laughing know him well and they know it is safe to laugh. If they don't know him well, they might be taking a big chance. Maybe they feel safe because they are in numbers laughing. I don't think you can protect everybody in the library. You have to let some people take risks. If these people come in again, those who laugh, you might say you are concerned about what this guy might do and ask that they consider taking it easy with him. You might say to the guy himself that you are afraid of what he might do and that you don't want him to hurt anybody. I really don't know what you can do.

Participant: This is my question about your theory of confronting them. I still don't know that legally we in public institutions can ask a patron to leave on the basis of what someone else has said.

Mr. Poimboeuf: You can certainly ask them to leave if they are making noise. I think that is what we are talking about. This is something you have observed. They are standing on the table and shouting and you can say that they are disturbing somebody in the library.

Participant: I work for a public facility. It is my understanding that in our place we can ask people to leave. I don't know what kind of legal backing we have. It is hard for me to believe that public law would not allow us to conduct our business. My thinking tells me that providing a research environment is our primary responsibility. If something interferes with that, then we have a duty to interrupt the interference. I guess a lawyer would have to settle it.

Participant: Our student and staff handbooks are very specific. Even in the classroom, the teacher has the sole authority. If somebody is disruptive, he can be forced to leave. The same thing is true in any of the buildings on the campus.

Participant: It cost me a lot to call the police, because I got out of college in the mid sixties when the cops were the enemies. I took part in my share of demonstrations. I was a classic late sixties libber and it cost me a lot the first time I had to call the police. It violated every liberal instinct. But so far I've had really good luck in dealing with the police. They are very sympathetic. They are not interested in putting people in jail; they are interested in getting them out of a bad situation, and it is not up to us to judge what kind of help they need. We just need to end the situation.

Mr. Poimboeuf: I don't know what Don's going to tell you, but I suspect that what the police do a lot of times, when they encounter a mentally disturbed person, is take him straight to a mental health facility. They don't even bring him to the station. They bring him right to a hospital or an outpatient facility and say "do something for this guy."

Participant: This is a good idea for public institutions, I think, but for a private one it is not talked about too much, because we don't like it known that we are a hang-out for perverts. It may not be my responsibility to make these kinds of decisions, but it is my responsibility to keep the name of the college out of the morning paper.

Mr. Poimboeuf: Maybe you do become more of a counselor than people in a public facility.

Participant: We felt that with the milder deviants, like taking books off the shelf or shouting obscenities, that we send a student worker to deal with them; it works better than if we confront them.

Participant: I would feel very uncomfortable asking a student aid to do that. We've had the typical deviants. We had one who had a Polaroid camera. There were certain women that he found very attractive in the library and he wanted pictures to put on his wall. So he was running around taking pictures of all these women. He came to the reference desk and I asked him to give me the picture. He said he wanted it for his wall and I said, "I'm not going to be on your wall. I want that picture." I told him I would take his camera and stomp on it, so he gave me the picture. Then he gave me the other pictures, too, and I asked him to leave. He told me I was mean, but I did get the pictures. I couldn't wait for security.

Mr. Poimboeuf: Good, you know sometimes that works. You just need to have a kind of gut feeling for using that kind of tactics. I don't know if you are familiar with transactional analysis terminology, but that kind of move might be called "outparenting." Using more parent than the other person, let's say a police officer stops you and asks to see your driver's license, and you pull out the card and say, "What do you mean, following me so close, like that? Don't you realize I am in an emergency here. I was on my way to such and such." Sometimes if you have the right authority in your voice and you seem important enough, (I don't recommend this, believe me) but if you feel gutsy, you can come on stronger and sometimes that works. By the way, sometimes mentally disturbed people do respond to simple things. Just very brief commands like 'sit down', without a lot of other verbage. 'Come here', 'leave now'! Be short, very brief, especially with the agitated person. If the person is very agitated, maybe the best thing to do is just keep your distance; move people away from him and call the authorities.

Participant: I think that when a librarian encounters the usual problem: the peeper or the exhibitionist, we do it with a feeling of embarrassment, pity and anger. These are our feelings for the person. What we would like to know, I think, is what, on our part, will discourage this behavior. Why is this person acting this way? What if I ignore him, will that please him? If I confront him, will that please him? What is his motivation?"

Mr. Poimboeuf: That is a very big question, and I can't answer it for you. There can be a lot of things, and chances are you are not going to find out his special motivation; you are not going to do anything to stop that kind of behavior in your library. Maybe with that person it will have some effect if you ask him to leave. He might not come back. I hear you saying that you feel embarrassed to approach such a person, and angry, and I suspect there is some frustration there, realizing there is not much you can do.

Participant: One of our librarians pushed some books off on a peeper. That's very effective.

Mr. Poimboeuf: I suppose to be safe it is best not to wear a skirt or dress in the library. I have read that librarians have bleeding hearts, and I've read the same thing about social workers. I don't believe they can be categorized like that. I think what does happen sometimes is the librarian becomes attached to a person, even a deviant. You feel sorry for the person. You might feel you are the only one in this person's life who knows what he does so well. He comes here every day and sits in the corner over there, and you feel sorry for him. You feel a sort of attachment and feel that you have to influence him in some way. I think it is important for a librarian that he is not equipped, for the most part, (maybe some of you are, some have had very good training in the area of mental health) to deal with people with emotional disturbances. Maybe the best thing they can do is just pay attention to disobeying the rules and enforcing the rules.

Participant: A perfect case of this sort of thing at Vanderbilt a few years ago - we had this old professor emeritus of English who was really a shaggy dog. He was in his dotage. He came to the library every day. After he got to be 85 or so, his hands started roaming and he used to do this especially when he was on the elevator. The little girls used to come in and complain about this. We had a staff meeting to discuss it. Nobody had anything against this old fellow, it was just that he was frightening to children who had never seen him before. The women on the staff came to me and said they would like to propose a solution. 'We can handle him, we don't have any problem with him. Why don't you just issue him a key to the staff elevator. We'll take care of him; just keep him off the public elevator.' He tottered around with a cane, and so the key to the staff elevator was a kind of prestige symbol to him. We issued him one, and from then on there was never any problem with him.

Mr. Poimboeuf: A lot of times we have to use our own creativity - get together and figure out what is the best thing to do. You don't always need a specialist to tell you what to do about your own particular problem.

Thank you very much for having me here and I hope that things go well with you.

Dr. Welch: Because some of the literature suggested that librarians themselves may be the problem in libraries, I thought we might need to have a policeman present. I have asked Mr. Don Corbin, who is the trainer of police here in Monroe. He will be sharing some things about ways to protect yourself if you feel that you are about to face a violent situation.

Mr. Corbin: I will tell you a little bit about myself before I begin because I always like to know a little bit about speakers I hear. If a person is going to tell me how to do something, I like to know what gives him the right to do so.

I am a management major. I got my degree from Northeast in 1973. I've been with the police department for six years and in the training office for four years. My job is to teach. I teach here at Northeast and in the police academy. I teach for L.S.U. in the northern part of the state in its field and service programs, and I teach in the Alexandria police academy. I teach search and seizure, probable cause, the law, defensive tactics, firearms and well, you name it. I enjoy every bit of it. Part of my duty as training officer is to give talks like this, and I always enjoy it. Over the last two years I've made about 260 talks, and I've never talked about this topic. When Dr. Welch asked me to come today on a subject I've never talked about, I told him it would be a learning process for me. You can see this folder that I have; when I came today it was clean, and you can see the notes that I have taken, to throw back at you or to talk about a little more.

Dr. Welch asked me to speak on some of the problems that you have in handling a violent person. It is hard to tell librarians how to do that. It is easy to tell a police officer how to do it. I don't mean I would tell him to take his stick and go slap him up the side of the head or anything like that. A police officer is equipped to handle a violent person. He has a night stick, he has a gun belt and this type thing. He goes through 16 to 18 hours of defensive tactics training in the police academy, plus defense tactics seminars. He faces it more often. Hardly a week goes by that an officer doesn't have to use some kind of physical force. It might just be holding a person, but he has to use force. So it is easier to talk to them than it is to librarians. Listening when Charles was up here, I felt that some people don't know that we really do have a crime problem in this country. A severe crime problem. It has increased over the last ten years probably 200%. It is going out of sight. We talk about recognizing it and about talking it over with the people, but we don't really talk about stopping the problem. I think that is what we need to be more involved. Nobody understands as well as a police officer does how much it is getting away from us. Just as a librarian understands better than anyone else about the people who visit the library and what they do there. It reminds me of a thing the policemen like to talk about. We say that unless you've been there, you don't know. Don't criticize us when you haven't been there.

I listened to some of the things that you face and I didn't know those things were going on. So I can see that you do have a problem, a real problem, and nobody's been talking about it. I'm a police officer and I hadn't heard anything about libraries having problems. I thought that a library would be one of the fine places to go; it really amazes me. But that's what I mean, nobody talks about it. Nobody wants to do anything about it. We have little group meetings like this, but that's us trying to solve our own problem. Somebody said the legislators look for the paper in the morning to find out the scandal on the college campus. Those are the people that need to know about the problem and do something about it. I think there are ways of getting them to look at the problem.

You should make yourself aware that these things are happening. So many times, something will happen and we are shocked because we haven't taken the time to make ourselves aware that it is happening. The peeping tom in the libraries. I didn't know that was going on. I'll tell you this, and please understand I'm giving you legal advice. I didn't make the rules, so don't hold it against me. I would advise that you do not push books off the shelves on somebody, because if you do, you become liable in a civil suit, regardless of what he has done, if there is no aggressive behavior on his part and he is not trying to harm someone. He can't harm someone by looking up their skirt; he can only make them mad. Please, for your own benefit, don't push books off on anyone. You will run across someone one day who has read a little bit of law, and if you push books off on his head, you open yourself for a lawsuit.

Also, to the lady who was talking about the camera, there's no way in the world that the man had to give you the camera. He can take pictures in a public place. If you have rules, you can say you don't want pictures taken because it disturbs people, that is fine. But don't try to get the pictures he has already taken in a public place, because then you become liable again, both criminally and civilly.

You are really damned if you do and damned if you don't. You are trying to handle your problems. The people who should be helping us - the legislators, etc., are not helping us. We meet in groups like this and talk about things we can do to protect ourselves, but if the laws aren't made to help us, there's nothing we can do.

I want to address this to this man over here - he said the police officers of the sixties were the bad guys, the villains. Think about this; a police officer is riding around in his car at 12:00 o'clock at night and gets a call to a local bar. There is a fight, and this guy has knocked two or three people around, and stabbed one, and you've got to do something about it. The first thought is this: the police officer doesn't want to be there in the first place. He really doesn't want to go. He HAS to go. What is the sole purpose of his going? To keep anybody else from getting hurt. How can you look at him as a bad guy? The riots of the sixties were bad and the police officers were shown hitting people over the head, but if people weren't looting stores, tearing up books, burning down places, you wouldn't have seen a police officer. In some cases they are bad guys, but most of the time they don't want to be there. They would much rather be riding down the street watching for speeders and little things like that. The police officer's job would be much easier if all he had to worry about was somebody driving a car the wrong way. But he has to worry about child abuse, rape, murder, homicide and things like that. He doesn't WANT to. Just remember that.

You've got the vandals, the peeping toms and the exhibitionists. How many of you have had problems with female exhibitionists? Anybody? You've got them? They are not as numberous, though.

How do you deal with exhibitionists? I don't know about your other jurisdictions, your other police departments, your other agencies. But I'll tell you about the Monroe police department, and most of the big cities are similar. In a situation like that, a police officer usually has experience in dealing with it. He won't just come in and say, "You are under arrest for indecent exposure." He will try to talk to both parties and try to find out if there are grounds for the arrest. If so, he can make a legitimate arrest, based on another person's testimony, that gives the officer the probable cause to make the arrest. It might not be right, but it is legal. So we go to the police station and we have a PSE (psychological stress evaluator), both parties have to take the test, the accused and the victim. Usually that will tell where we should go. If the officer feels that too much stress is shown on the female's part and not enough on the male's part, then they will attack it another way. The officer will do everything in the world to make sure he has the case. Cases aren't being prosecuted in the courts today because they have to have an air tight case. But the point I'm trying to make is that if a person is accused of that, we won't just throw him in jail and say that he is guilty. We will try to find out for sure.

About the man on the table on the college campus - he's sitting on the table telling everybody that they are going to hell. The thing that the librarian should do right then is call for campus security or police. Because if somebody is going to get on top of a table in a library and start saying everybody is going to hell, I would think that they shouldn't be there. Now that is just my own thought. I wouldn't say, "Let's try to find out why he's on that table and why he's telling everybody to go to hell." That's not our place. That's Charles' place. We are talking about whether you have the right to ask a person to leave. Sure you do. Any time you are operating any type of facility and somebody is going against the norm, that's disturbing the peace. You can't allow someone to come in and run up and down on the tables. The problem should be addressed right then, before he has a chance to get the sledge hammer and tear the wall down. Handle the problem. That's what we are not doing. We're not facing it. It's there and we just say maybe it will get better.

That's like a man breaking into your house. You say, "If he gets the screen off, I still have a chance because the window is there." So you wait till he gets through the window. I say as soon as that screen is touched, call the police. Handle the problem when it begins. That's my advice to you.

What can we do with the violent person? We confront this guy on the table and tell him he is doing something we just don't allow, and he will have to leave. I don't say that you should take off your jacket and get ready for a fight. But you should see that you have a violent person; you should not say, "Look, I told you to get out of here." You can't bluff some people. It is like a policeman pulling a gun on a guy with a traffic violation and telling him if he doesn't sign the ticket he will shoot him and the guy says, "Shoot." I have seen that happen. So don't bluff. When you see someone getting upset and angry like that, the best thing you can do is just talk to him. That is the best thing the police officer can do in dealing with these people.

Dr. Welch mentioned that usually librarians do not like to get the police involved. But the good policeman wants to be called. The policeman riding around in the police car wants to answer your calls. He can learn. He will learn that the library is not the place that I thought it was. I thought it was a fine place to go and you have scared me away.

Let me tell you some rules. When dealing with an excited or violent person, try to get him to quiet down. Remember that a person who is guilty of something, like the peeping tom or exhibitionist, most of the time will react violently. He will raise his voice, like shoplifters in stores. If he is not guilty, most of the time he will say he doesn't know what you are talking about. If you see someone down on the floor with a book, don't ask him what he's doing. You know what he's doing. But you can't walk up and say, "Oh yes, you're peeping again." Sometimes when people are guilty, they try to see what they can do when they are accused.

For example, here at Northeast five or six years ago, at a football game, a guy I know got drunk and was causing problems. A police officer went over to arrest him and he said to himself, "Well, I'm drunk, I know I'm going to jail, so I'll just see what I can do." He hurt several policemen and ended by getting hurt himself. Some of these people might do that in your library. If they know they are caught and probably going to get kicked out of college, their parents will be terribly shocked, so they just try to see what they can do. You say, well, he might come back later. I would much rather he would come back later and burn the library down than to burn it with me in it. Don't threaten or be abusive. Keep yourself calm. I try to tell police officers this. They have violated the law, or you wouldn't be bringing them in. They are wrong and are hurting society. You are just taking this person out of society for a short period of time. And believe me, in today's society, it is a SHORT period of time.

Remember it it not your place to find out why he is doing what he is doing. It is your place to stop it. It is your library, and there are some students who really want to learn. I wouldn't have my degree in management now if it wasn't for the library at Northeast. Not that I used it over and over, but it was where I did my studying. I couldn't study at home or where I worked, so I would come to classes two hours early, go to the library, get in a corner and start to study. That was the only time I got to study. I was one of the few people that really worked sixty hours a week. You know everybody says they worked sixty hours a week and walked nine miles to school and they got their degree. Well, I did work sixty hours a week, and the library helped me. There are kids who want to do that; and it's your duty and the court's duty to make sure they have that place. We've got to face the problem and stop it.

What Charles said about sometimes telling off an officer and acting like you know somebody, believe me here in Monroe that is the quickest way to get a ticket. I teach in the police academy here and in Alexandria and at L.S.U. as I said, and I try to teach the officers that any time somebody tells them, "I'll have your job for this," just write a ticket anyway. You stopped them in the first place because they violated the law. If they say they know the mayor, just say that you know him, too, and write the ticket.

Participant: You said it is all right to go ahead and call the police when you have a peeper or something like that. What kind of laws are there, can you depend on public nuisance laws or something like that to arrest these people, or are you going to let them go and they will come back to the library?

Mr. Corbin: You have disturbing the peace statutes, indecent exposure statutes, all kinds of statutes governing things like that. The idea is this: if the person does something against college regulations, you have the right to bar them from the library. I'm not sure on that, but I believe if they do something against college regulations, that you can.

Other states are probably the same as Louisiana. You would not believe the recidivism rate that we have - people who are allowed to commit crimes over and over. I did a study on this problem, and presented it in my Self Protection for Ladies seminars, and any other time anybody wants to hear it. People can't believe it. There are persons under thirty years of age being arrested more than fifty times for crimes against another person. I'm talking about armed robbery, rape, theft, arson. I've got one guy who has been arrested six times for auto theft. You can get ten years for auto theft.

Somebody said earlier that you don't want to see anyone thrown in jail. You can believe me, if he gets thrown in jail, that is a rare case. I had a rapist that was brought in Monday or Tuesday of last week. He looked familiar to me. It was attempted rape and simple battery. I asked who he was. Four years ago, I arrested him for aggravated rape and aggravated burglary. For aggravated rape in Louisiana, you can get the death penalty, and for aggravated burglary you can get thirty years. I got a full confession out of him sitting in the briefing room. The witness picked him out. It went to the grand jury, came back with a true bill. He was allowed to plead guilty to a lesser offense. He served two years. He got out and two weeks ago, he broke in on a young lady, raped her and told her he would kill her if she reported it. The next day, she told her boy friend about it. When the boy friend confronted the guy, he used a two-by-four on him and stabbed him in the shoulder. He was arrested for aggravated battery. You can get ten years for that. About six days later, when he was out on bond, I guess, he broke in on another woman. She got away from him but he dragged her back in the house. A witness saw him. He bit her on the head and back and she still got away from him. That is when we got him. My thought is if they are not going to throw them in jail, they are wasting time. This is not an isolated case. That is not just in Monroe, Louisiana; that is in your communities too.

Our federal grant money is being thrown into things that it shouldn't be - it needs to be used for some type of rehabilitation. I think we can do it. I don't believe in Hitlerism, digging a hole and throwing everybody in and burying them. But I believe we had better change what we are doing. The space for the good people is running out. It is mighty sad when you can't go to the library in peace.

Participant: What about detaining someone? If you call campus security and they say someone is on the way?

Mr. Corbin: Just stay calm and get the best description you can. If you see someone lighting a fire to burn down the library, just get everybody out. Don't get hurt trying to stop someone like that. I'm sure you have campus regulations that tell you what you can and cannot do. But I say, "No." We tell people they can detain them 60 minutes for shoplifting, but don't fight and argue with them.

Participant: Do you have any special advice for dealing with people who are spaced out on drugs?

Mr. Corbin: Leave them alone. That's all I can say. That's like the marijuana thing. Everybody wants to legalize it, but we don't know what it is going to do to people. It is the same as the drugs that are already on the campuses. We know they are there. I say just call a policeman if the person is causing any problems. Stay away from those people. Any time you are taking something that is altering your system, you just don't know what it can do. You just don't know if he will become extremely violent, so I say stay away from them.

Participant: I think librarians are offended and mad when drugged kids come into the library and just flop there; they are so greasy and flowery and smelly; sort of wall-eyed. But basically, I guess you'd have to say most of them are harmless. But they give the place a bad name. It's offensive.

Participant: Occasionally you run into the more sophisticated type of fellow who has discovered that air vents lead to certain other places. You don't really have enough personnel around to trap them. Sometimes you know they are there, because some lady has come out of the ladies' room and reported somebody was looking at her.

Mr. Corbin: All I can say is try to block off all entrances they may have. Have someone check those things and if they find someone, just call the police.

Participant: I have a student that used to work for me who has gotten involved in drugs and other things and he calls me. I'm the only person he can think of to talk to. He called me the other day. He was in jail and needed bail money. I would like for him to quit calling, but I'm afraid if I tell him to quit calling, he might think, "Well, she didn't help me when I needed her." What do you think about that?

Mr. Corbin: When we stop standing up for ourselves, we shouldn't ask someone else to stand up for us. I would say that I don't want him doing this and I would tell him. If he doesn't like it, then you call the police and let them put it on report. In a situation like that, we brief the shifts and say there is an expected prowler or whatever at this address. He's called and threatened a lady. Check it out. Each shift gets that read to them when they come on duty. Each overlapping zone checks it, too. That is about all we can do. Maybe you think that is not quite enough.

I enjoyed coming today. Believe me, I learned. I have learned just by listening to you, and especially talking with Charles. I understand librarians better. That's where the whole thing is, understanding.

# DEVIANT BEHAVIOR IN THE LIBRARY

Dr. Dale Welch

There is not a great amount written about deviant behavior in the library and how to control it. We are still uncertain to what extent deviant behavior is going on and to what extent people in the library can control it. I want to touch on several things and then I will have some recommendations based on the review of literature.

One thing I would like to point out, and I think you are aware of it, is that students on the college campuses view deviant behavior in the library as different than that which occurs outside in society. By that I simply mean that deviant behavior is not viewed as a serious offense, although if the same students were to view such behavior in a store, it would be considered serious. If it happens in the library, it is not. Students do not really perceive some of the behavior in the library as criminal behavior, even though, by law, it is criminal and outside the library it would be considered criminal.

One example of this, pointed out in some studies of student reaction to deviant behavior, is that the punishment that is attached to deviant behavior should not affect the person after graduation. Students felt that punishment should be academic punishment and not anything that would be detrimental to his life chances after he got out. There is a difference in perception of behavior.

One similarity of the library and the outside society is that we cannot expect a great amount of student control of deviant behavior in the library. By that I mean that students are not going to be our best source of reporting deviant behavior. I don't think that is anything that you are not aware of.

Let me give some examples. In one study, there were 82 people that were in the presence of a person mutilating a book. Nine of the 82 reported the incident. Thirty-five saw the incident occurring and did not report it. Thirty-eight reported it, or at least told the interviewer after the experiment was carried out. They told the interviewer they did not see the person doing it and yet it was done almost next to them. Only nine out of the 82 reported the incident. The reasons given for not reporting were non-involvement; none of my business; I started to, but decided not to; I thought maybe he had permission; he looked too big and mean; I did not consider doing anything.

Another example of student reaction of deviant behavior, and this is primarily book mutilation and theft, in a study in 1974, out of 168 students, 14 admitted tearing up journals in the library. This was on a self-report type of questionnaire. 154 said they had not. 63% of them said they would not report anybody if they had seen somebody else doing it; only 43% said the act was definitely wrong; 32% said they themselves had considered tearing out a journal article, which could raise your percentage, 2/5 of your student body could be considering tearing out journal articles. In a study at Ohio State, they did a study on stealing books. Three hundred eighty students were involved and 19 of them admitted to stealing books. These were primarily from the humanities and arts; I don't know if that is surprising to you or not. The 19 that were interviewed and said that they were using the library primarily for leisure reading, were not there to do research, which comes back to the point made yesterday about the benefit of setting aside a reading or study section completely separate from any security, that would provide a study hall type atmosphere. The 19 students reported that book theft was motivated by material deprivation. By that, they meant they were dependent upon themselves and did not have the money to make copies or buy a copy of the book. The students (all 380) pointed out that student security guards were not thought to be an effective limiting control mechanism in the library. Several of you reported that you use student checkers at the doors.(Dr. Welch refers to a questionnaire that institute attenders had completed for him. A summary of the responses is appended to this transcript.) This may raise some questions for you as to whether or not that is a successful means of control.

It is probably obvious to you that one of the real problems is that there is a different perception of deviant behavior in the library and on the outside.

The peeping tom or the exhibitionist in the library may simply be viewed as kind of funny or annoying, but it is not really detrimental; it is not going to harm anybody as long as it is happening in the library. If it happened out on the street, people might be more concerned about it. There is something about the library that sets it apart.

Let me just mention a few things about unpredictable deviant behavior. I simply say this to make the point that there are some behaviors in the library that you can't do that much about unless you have airport style security as people come into the library. I hope we're not going to have to go to airport type security at library entrances. A few of these are obvious: the custodian, the staff member or student who walks in with a gun and shoots seven or eight people, there's nothing you are going to be able to do to prevent that type of situation. The library itself lends itself to many secluded areas. I don't think you'll be able to do a lot in controlling the exhibitionist and the peeper, as long as they are not harming anyone. I think the only way you can stop an individual is to have definite proof that he did carry it out.

The problem in sexual deviancy, and a lot of people are worried about it, is the fear of the unknown. We have a fear of sexual criminals, but studies show that the sexual deviant does not progress to more serious crimes; he stays with the crime that he gets a kick out of. If he gets his kicks out of your showing fright when he opens his raincoat, he's not likely to progress to a more serious offense and sexually abuse you in some other way.

The peeping tom gets his kicks from seeing the expression on your face when you move a book and there are his eyes staring through, or when you look under the table and a student is crawling around; or when the person is sitting across the aisle and he knows you are uncomfortable because you keep moving, trying to arrange your legs so that he cannot see beyond a certain point. I don't think these people are dangerous because they are going to basically stay at that level and it's going to be very difficult to prove anything, if you try to bring charges against them.

In most cases, there's nothing you can do to prevent a rape in your library. The only thing you can do is examine your library carefully and find out where the places are that are conducive to that kind of behavior, then try to do something about darkened areas, lone entrances where people might come and go on rare occasions.

In dealing with the mentally disturbed person, I think the real problem is the fear of the unknown. If you come in in the morning and find a boy and girl locked up in the library and it just happens that they were good friends and it just happens that the lights were turned out and they couldn't find their way to the door and all the doors were locked and they had to stay there overnight, what can you do? They probably did commit some illegal acts while in the library, but the only thing you can do is turn them over to the dean of men/women and suggest that some type of disciplinary action be taken. But it is questionable what charges might be brought, except maybe vagrancy or trespassing.

Let me talk about some contributing factors to deviant behavior in the library. I think when you view the architecture of a given building, you can see some features that are potential places for deviant behavior to occur, such as an indented stair well (which we probably don't see a great deal of in modern buildings); lettering on buildings down low enough that students can reach up and pull it off; a tree next to a wall where a student could get access to equipment on the roof; the alarm system or master light switches right beside the door.

The thing I would mention about environmental spaces is the concept called defensible space. The two primary writers in this area are Oscar Newman and C. Ray Jeffery. Defensible space centers around urban dwellings. They are not focusing on libraries, but you may want to read Crime Prevention Through Environmental Design by Jeffery or Defensible Space by Newman. Then the Law Enforcement Assistance Administration has put out some books which are already in your library and you may not be aware of, Architectural Design for Crime Prevention and Design Guidelines for Creating Defensible Space. These are government documents and you might look through these to see some ideas that might reduce physical dangers in your library. Defensible space was defined yesterday as trying to create a sense of community leading to a sense of responsibility to defend areas.

An important part in the physical area that should be involved is to evaluate the use of your copy machine. It was rather interesting throughout the literature, one of the major causes the students gave for theft and book mutilation was use of the copy machine. They either thought it was too high, not available, they felt they did not have direct access to it, or they did not have change and didn't know where to get it.

Maybe you need to evaluate your charge out system. Maybe I'm not deviant enough to figure out ways to alter dates or cards, or switch cards, or whatever, but students have indicated that they could alter the charge out system if they are simply using some kind of stamp on the cards. Lots of libraries have gone to the ID cards with the stamp. A date stamp can be switched out very easily.

Another physical aspect that should be evaluated carefully to prevent theft or at least make it possible to identify theft a little easier, is to mark library materials clearly. Some of the studies pointed out that libraries do not always visibly mark their materials so that they can quickly see if a student is carrying out a book from the library. It could be very expensive if you have to go around and put a stamp on all your books, but it might be an identifiable method to reduce deviancy. I really think that in the physical area, students in library science, if they are not already, should be given more training on the physical structure of the library itself and some problem areas.

We try to create good surroundings in order to attract people. But many times the good surroundings attract deviants. Perhaps we are going too far to make things lovely to attract the unlovely.

Some administrators contribute to deviant behavior, some research in the crime field, not library field, simply point out that 40% of burglaries and vandalism are caused by pure carelessness of the business people. I think this could very well apply to the library - not checking rest rooms and doors carefully - simply pure carelessness on the part of the staff. You do it every night, five or six nights a week, and after a while it is a humdrum thing and you get a little careless.

Another factor that is said to be an administrative factor to deviant behavior is lack of enforcement of rules governing misconduct. I think it has already been pointed out that you are good samaritans and you are here to help people, but at the same time you have to be careful that you are not taken advantage of. Quite a bit of the literature now is stressing the fact that librarians need to take a hard nose look at what they are doing. For example, pressing charges against a person who is caught stealing a book; pressing charges against a person who has definitely been caught by you or a security officer in some kind of sexual deviancy. Try a hard nose approach in enforcing the rules. In one rather extreme case, a lady had been stealing books from a library and selling them. She was caught and fined $5200 and given a five-year probation sentence. A few cases like that in the library and it will hit the student newspaper and maybe discourage a few of your book thieves.

Another administrative contributor to delinquency is inadequate staff, inadequate staff training and inadequate staff policy. By staff policy, I mean a set of rules that all the library staff are aware of, telling them who to contact, what the law is, what to do in given situations. Identifying people on the staff who have capabilities for handling deviants would be helpful as well.

Another one is lack of awareness of applicable laws. Too often we don't know what the law is or how it actually applies to the library. Maybe the library is some kind of sacred cow and doesn't really fit under the legal realm. One thing I would encourage is to become more aware of the laws that do exist. What happens if you catch a student with a book among his other books walking out of the library? What is your legal responsibility and legal right?

Another one is to become more aware (the administrative staff) of student reactions to deviant behavior. I think you could do a lot if you would spend some time in your own libraries doing some research trying to find out student viewpoints in problem areas of deviant behavior. Try to become more aware of what your students view as problems or their reactions to certain deviant behavior. Let me just mention, very quickly, some student reactions that I pointed out. Most students are very ignorant about the library. As an instructor in sociology, I know they are ignorant because they don't know how to write a term paper and don't know how to use Reader's Guide so they can find material. I'm talking about the student who has no idea of the replacement cost of stolen or mutilated materials. One person suggested we need some articles in the campus newspaper about the time it takes to replace articles - some publicity type campaigns. Students perceive that periodicals are very cheap, easy to replace and that is why they can be cut up so easily. Some of the studies suggested that what happens is that a person learns that he can steal a book. He tells his friends and they learn--and it passes on. Book thieves and mutilators say that (about 75%) they did not learn this art from their friends. Their peer group did not have the impact on their stealing that particular book. They were simply stealing for their own benefit - a choice they made for themselves.

Let's look at some legal problems for the librarian, very quickly. A major problem in the legal area, as I see it, is the staff feel useless as enforcers of the law. Probably this results from three things. It is not what they are there for, they don't know what laws apply to given conduct, and then they worry about what will happen if they falsely accuse somebody. Those three things are enough to make you skeptical about becoming involved, from a legal point of view.

I tried to contact the state of Virginia about a law that was enacted there in 1975. Are you familiar with the library law of Virginia that was passed in 1975? The same law was passed in Mississippi.

There are two basic elements to the Virginia Act of 1975. One is that concealment of a book on the library premises constitutes evidence of intent to commit larceny and then the burden is on the offender to prove that he or she was not trying to steal the book. The other is that the librarian has the right to detain an offender fro questioning or arrest without fear of adverse legal consequences. This model law is outlined in the College and Research Libraries, March 1977, and it might well be worth your time for area librarians at a meeting sometime to review that and encourage legislatures to pass a similar law. A lot of laws that are already there may be beneficial in your area, but most of us have no idea whether they are applicable or not. For example, in some states if a person buys material with the identification mark of a library, they can be imprisoned for that purchase. That is not the book thief, but it is at least getting the man who's buying the stuff apprehended, and also getting pawn shops to contact police if someone is trying to sell a book from the library. Again, not all states may have that law.

We had a case in Oklahoma where a girl actually cut out a journal article and turned it in to me as an abstract of the article, with underlining so that I could see that she had read it. This raises some questions: 1) the student probably did not realize what the potential dangers were for her in her destruction of state property; but, more importantly, it raises some questions about faculty - they need some education on it. If faculty members are not reading reports, maybe they should be encouraged to read all the reports that are turned in. This student may have thought that I, and other faculty members on campus, do not read this material that is turned in. I turned it over to the school attorney. By law, the girl could have been fined $50 and given one year in prison. I left before anything was done, so I don't know what the outcome was. When she found out what the law said about the situation, she became very concerned.

This semester three students turned in an abstract of an article. The article did not seem to relate to what the topic was, so I was going to come over to the library and check the article and read it myself. I sent my student worker over to see about finding the article and it was missing. I did not report it because the fact that three people used it did not mean that they cut it out. Maybe I should have reported it and let the librarian decide whether the students should be called in and confronted with the fact that they abstracted an article last week and this week the article is missing. It is not an article that is likely to be widely used across campus.

Sometimes a faculty awareness of your problems and getting them to report questionable cases might give some assistance in that area. The legal area is very difficult and if you do not have a school attorney, you have some real serious problems in being able to handle that. Here at our school, we have to get a legal opinion form the attorney general, which may take anywhere from six weeks to two years. Try to become aware of what laws apply to library theft.

Just as a side point, on the Virginia Act, I tried to get hold of the state librarian there and could not. I got a reference librarian and I told her I was trying to get some material about the Virginia Act of 1975 which is in regard to a student concealing a book and being charged possibly with theft and that librarians cannot have any adverse effects from it. She didn't know anything about such a law.

Let me make some recommendations very quickly. The first one is very general. I would encourage you to use your sociology and psychology classes, not all of them, your research classes or experimental type classes to conduct some research on behavior in your library. You've got a ready made market for some interesting research to be beneficial, perhaps to a professor who wants to publish, or he's going to lose his job next year. I was not aware of it until Dr. Larason got me involved in this capacity of the opportunities for research. It can provide many interesting things for you as a librarian. They are always looking for projects to get involved in. Some of these were experimental type things by psychology classes where they actually set up a situation and observed the student reactions to it.

Let me make some very quick suggestions on physical arrangement. Make rest rooms an unpleasant place to be. If you have a lovely rest room--chairs for them to relax in--you are inviting deviant behavior. One person suggested that what we might do in libraries is start making airline restrooms. Make the lighting very bright. I don't know how realistic this is. Some things that take place are magazines stuffed in stools, maybe where some of the cutting of articles takes place, and you also have the contact of some of your sexual deviants in the library.

A second suggestion is to demand that the facility be rekeyed if you are having some unusual experiences. In Vermont Square Library in Los Angeles, they had 15 robberies. They kept asking that the building be rekeyed. The administrative staff just didn't do it, but finally after the 15th, they did. Not all of the robberies were where the person got in with a key, there were some break-ins, but they were sure some were taking place by people who had access to keys. Know who has the keys to your library. It may be that in your library people have keys who don't really need to have them.

A third one, break up areas where patrons congregate in too large groups, or where there is excessive noise. You can do this simply by rearranging the furniture.

A fourth one, and this was a rather obvious one, lock rest rooms and doors that are not necessary for functioning at a given time. I know you can't do some things with fire doors because of certain regulations, but one author pointed out that there are times when your library staff is lower and unless there is a law that says you can't do this, just lock rest rooms and simply say there is one or two on first floor if your library is fairly small, and maybe one on another floor that is accessible so that you don't have ten rest rooms that are available to students when you don't have adequate staff to cover.

Five, evaluate the security check at entrances. Most of the studies pointed out that electronic devices were pretty effective in reducing the amount of theft. Students recommend these devices as the best way to control student thievery and in studies where they were used, there was a decrease in the amount of theft. One of the things that is obvious in readings and in some of the comments you all made, many people have no idea how much is really being stolen from the library.

A sixth one I might point out, post signs throughout the library directing students to change machines. We have certain legal codes now regarding the copy machines, and students need to be aware of them. Maybe in the periodical section with open stacks you ought to post a couple of signs stating what the penalty is for mutilating journals. Students suggested that as an idea of reducing mutilation and theft. Most students who mutilated and stole books said that the copy service was inadequate, so evaluate your copy machines.

Here are some administrative recommendations. Take a hard line with the disorderly person. Be firm, be assertive and see that rules are followed. It is almost impossible in many cases, when working with the deviant, for a female alone to approach the deviant and try to confront him. Always try to get help or get word to someone about what you are doing, or have other people there. Show some solidarity behind what is being said. Encourage the head librarian to stand behind the decision that you make, if it is legally right.

Develop a policy statement for your staff. How many of you, in your library, have a manual for the staff stating what some of the laws are that are applicable to the library regarding theft and mutilation? Stating whom to contact in certain kinds of emergencies? How many of you have a hand book of this kind that everyone is aware of? Only about six.

A third one, contact your area mental health or psychology departments, social service agencies for training programs. I wanted two people this morning to share some ideas that they have about the deviant, but an indirect benefit of their being here stresses the need for this. Neither one of the people, when I talked to them a few weeks ago, had any concept of the problems that you are having. These people, if they work with you and you work closely with them, can come and provide some training for your staff that may be helpful. If you have a psychologist who teaches a course in personality you can use that person. Most of the time it is not going to cost you anything, or at least very little. Get that person to come over and have a training session for the staff. I think it is obvious that all libraries need to make more contact with agencies that can provide services. You can also help them.

My personal feeling is, based on review and problems, you ought to take the hard line and not get to the point where you are trying to make the decisions. I hate to say you are not capable, but you do not have the training that is needed and I think you need to turn it over to campus security. I feel that because of mutilation, theft and sexual deviancy, those types of things should be given a hard line response. If it is decided that the person is not guilty, let that be someone else's decision and not the librarian's.

Some of the areas where you might have problems is with senior citizens who come in. If you are aware of senior citizen programs in your community and if you have a senior citizen who comes in every day and is posing something of a problem, you may call someone to come out and talk with this person and get him involved in these programs.

Another suggestion is that you might evaluate your relationship with the campus and city police. You need to become more aware, let the police know the problems, let them know your limits, and find out what their limits are. Maybe the city police have no jurisdiction at all on your campus. Maybe your campus police have no jurisdiction to make an arrest. It doesn't do any good to call them if they have no jurisdiction. So know what the limits are of the various agencies.

Fifth, evaluate the use of your janitorial staff. One interesting idea, if you are already understaffed, is to work with your head of maintenance at the university to find some good, personable, qualified people in the janitorial area and let them work during hours when you have fewer staff. The suggestion is to increase your staff by using your janitorial staff. Most of the things they do will not disturb the patrons in the library. You can't have them buffing the floors, but there are many things they could do.

Number six, pair up when closing and insist that campus security assist you. If I were a female and had to go through three floors to make sure lights are turned out and checking doors, I would be very scared, even with two of us. I think you can insist that campus security send someone to the library at closing time. Insist on it.

An instructional recommendation: evaluate the requirements for under-graduate library science programs. Do you require students to take beneficial psychology, sociology, or mental health courses? You may have a psychology elective, and the student takes 201, Introduction to Psychology, that is perhaps not the best course. Maybe he should take one on personality disorders, or the abnormal adolescent. Evaluate the curriculum and see if your library science students are actually getting in some courses that will assist them in handling behavior problems.

Some face to face recommendations in dealing with the deviant, approach the deviant with assertiveness; some librarians may need training in this. Go to the person as though you are an authority and know what you are doing and you know what you are going to do with that person. If you act frightened, you will have complications in most cases. Be aware of space of the individual. Psychology has done some things in space in the fact that we like to have 18-24 inches or maybe 24-26 inches in talking with easy other. If you walk up and are within 12 inches of a person when you confront him, right off that infringement of space may be enough to set him off. Give him his territory so that he does not feel threatened. Someone pointed out that you have problems with foreign students and feel threatened by them. That, in itself, may be a space thing. Latin American students tend to get close when they talk. Americans like to stay very far apart. When a student confronts you, he may come within 12 inches of your face and you feel that that is a threat. Listen, but don't touch the person in a forceful way. Be careful about blocking the person into a corner. If he feels he has no escape, he may react and push you out of the way or simply find some way to get out.

Try to get the person out of immediate public display. It is better not to have a confrontation where people are looking on. And the last one, after you have done all those things and got him out of the library, had him arrested or whatever you have done, go somewhere and scream.

## DEVIANT BEHAVIOR IN THE LIBRARY
## SUMMARY OF PARTICIPANT RESPONSES

Please respond to the questions below from the viewpoint of your own college or university and library facilities. DO NOT sign your name or identify your library.

1. Is your library a

27 College or University (4 year)
1 Public
1 Community College (2 year)

2. Size of student body at your college or university

4 less than 2,000
3 2,000 - 4,000
3 4,000 - 6,000
4 6,000 - 8,000
7 8,000 - 10,000
0 10,000 - 15,000
7 over 15,000
1 NA

3. Which describes your library structure

17 All references are housed in one facility
9 Major library facility with special libraries such as engineering, chemistry, medical, law, gerontology
3 NA

4. Do you offer some type of community programs through your library (e.g. children story hour or humanity film program)?

3 Yes 25 No 1 NR

5. Which best describes your book check at door exits

10 Electronic theft detection device
9 Student checker
2 Full-time staff member checker
2 Student and staff checkers
4 No check of books as one exits
1 Other

6. Does your library provide

5 A lounge for students for eating and drinking cokes and coffee (separate room so labeled)
2 Vending machines for students in a designated area (hallway, foyer, etc.)
20 No beverages or eating allowed by students
2 Other

7. Do you provide photocopy machines

26 For individual student use throughout the library
6 Centralized area with all copies made by designated library workers
0 No copy services available
3 Other

8. What is the cost per photocopy for students?

0 Free
14 5¢ per page
15 10¢ per page
1 Other

9. What are the three most serious behavior problems ( e.g. theft, book mutilation, peepers, exhibitionists, mentally disturbed, etc.)? Please be as specific as possible in describing the deviant behavior.

| | |
|---|---|
| Book, periodical and magazine mutilation | 22 |
| Theft | 15 |
| Peepers | 6 |
| Peepers through suspended ceiling | 3 |
| Exhibitionists | 6 |
| Sex complaints | 1 |
| Graffiti | 4 |

| | |
|---|---|
| Mentally disturbed | 3 |
| Hiding of materials | 3 |
| Talking | 3 |
| Destruction of property | 2 |
| Eating | 3 |
| Returning books to shelves to avoid fines | 1 |
| Physical violence from foreign students | 1 |
| Religious and political fanatics | 1 |
| Unauthorized exits through fire doors | 1 |
| Theft of personal property | 1 |
| Ripping sentronic labels from books | 1 |
| Smoking | 1 |
| Profanity | 1 |
| Food in books | 1 |
| Beer cans on book shelves | 1 |

10. You are aware of problems at other libraries. List areas that are of little or no worry to the staff at your library.

| | |
|---|---|
| Fear of assault (personal safety) | 5 |
| Mentally disturbed | 4 |
| Exhibitionists | 3 |
| Fear of going through stacks | 2 |
| Sexual deviancy | 2 |
| Major mutilation | 2 |
| Robbery | 1 |
| Theft | 1 |
| Theft of personal belongings | 1 |
| Graffiti | 1 |
| Drunks | 1 |
| Molesters | 1 |
| Fighting | 1 |
| Security problems after hours | 1 |

11. What do you consider the major factors that hinders or prevents you and your staff from controlling or reducing the deviance?

| | |
|---|---|
| Lack of staff | 6 |
| Monitoring areas | 2 |
| Staff get frustrated too easy | 1 |
| Staff vision is not in line with stacks | 1 |
| Staff not trained to handle types of deviant behavior | 1 |
| Primarily female staff and they aren't viewed with much status by foreign students | 1 |
| Inability to detect potential deviants | 1 |
| No authority to detain or question deviants (no established policy between campus police and library administration as to the role of the librarian) | 1 |
| Lack of administrative support (union) | 3 |
| Catching sexual deviants (proof of behavior) | 1 |
| Student reluctance to report incidents | 2 |
| Inability to get police cooperation | 1 |

| | |
|---|---|
| Hesitate to "hassle" the student | 1 |
| Seclusion the person feels in the stack area | 3 |
| No electronic detection devices for theft | 1 |

# Architectural Approaches to Design and Behavior

### Ms. Nancy McAdams

My assigned topic, Architectural Approaches to Design and Behavior, initially has given me a little difficulty because I don't think of design and behavior as coupled in quite that way. But the more I got into the subject and began to analyze my philosophy, I realized that behavior is an integral part of my design considerations. I just hadn't put it down in words in quite that way before.

I want to begin by speaking about architectural programming. The architect's role in a building project is a three stage process. First is the preliminary design phase. During that phase the building's form and detail are determined. Next is the production stage when the working drawings and specifications and contracts are developed. Then the construction stage when the project is actually built. During the first phase of design, the architect works most intensively with the owner of the building. During the second phase, the documentation period, the architect works mostly with engineering consultants and the architect's own production staff. Then during the construction phase, one works with the contractors and mechanical and structural sub-contractors.

In recent years, there has been a trend to extend that 3-phase process in both directions. Into a later stage of post occupancy evaluation, which was talked about earlier today, and, also, into an earlier stage which is a pre-preliminary phase for program development. It is this earlier, pre-design phase that I would like to talk about. It is called architectural programming.

Architectural programming is simply defining the purposes of the people who will use the building. It is a process of identifying and ordering the spatial, environmental and aesthetic requirements of the building and of identifying the constraints which have to be observed. Design decisions occur throughout the whole process, including the occupancy phase. For example, when Dr. Ittelson rearranged his desk, he was making a design decision.

Architectural programming is a means of developing criteria for making design decisions. It provides a systematic statement of external relationships of the building to its community and the internal relationships of all the activities and functions that will occur within the building, and conditions in which they should occur. It enables the designer to identify and consider all the available options, so that he will then be in a position to choose the best.

The architectural design process involves a whole series of choices. All of those aspects of a building which we think of as its architecture - form, mass, scale, texture, color, volume. All these elements are determined by choices among materials, among structural systems and among mechanical systems. There are then choices among all the ways of putting those things together, to shape the environment inside and outside. Architectural programming attempts to rationalize the choices and to make them consistent.

One of the pioneers of architectural programming calls it "problem seeking", and that name recognizes its role as the first stage of problem solving in the design process. The newer kind of architectural programming differs from previous efforts by the architect, or by the client, in a couple of important ways.

In traditional preliminary design, the architect begins with one of two premises, depending on when and where the architect received his or her design education. That generation of architects who were trained roughly before World War II can be categorized as eclecticists; that is, they choose from among the whole world of existing architectural form and style what they think is appropriate for the project that is being designed. They design a shell that fits into that style and then they try to pigeonhole activities and spaces inside that shell.

The generation of architects trained more or less after World War II, and continuing on into the present, follow the approach of functional planning. You've heard it described as "form follows function", in which the building form is determined by the function that it is to contain, as well as by its materials and its structure. The building expresses all of these things on both its exterior and its interior. From either of those two design premises, whether it is eclectic design or the "form follows function" approach, the design decisions in the preliminary phase are based on conversations, mostly, with the owner, or on a program statement that has been prepared by the owner as to what the owner thinks is needed. The emphasis is usually on quantitative information. For a library, one would indicate how many volumes, how many readers, and how many staff members. One would also provide descriptions of operations, such as the work flow of technical processing for new materials.

Typically, the architect will be informed as to what and how big the building is to be, but not what it is to be like, or why it is to be like that. This kind of knowledge may come to light during the series of design conferences which the architect holds with the owner during the design process, but it may not ever come to light. If it doesn't, design becomes a kind of trial and error process--an unproductive one which may never quite arrive at a satisfactory solution.

In an academic setting the architect's client is the institution. The owner of the academic library building is not the library, but the institution, the university or college. The people who work in the building every day as staff members, or frequently as readers, are the building's users in the sense that "user" is employed in the context of architectural programming. This is a different sense than we have been using for this word for the last day and a half. During the design conferences, the architect must deal with some person who is empowered to represent the owner, the institution, and must rely on this person's knowledge and understanding of the library or on a written library building program to articulate the library's needs.

The traditional written library building program is usually put together by the library administration, acting as spokesman for the whole body of users (the staff users and public users). It states the library's needs as the administrators perceive them. Sometimes these statements may be tempered a bit by what the administration feels is economically possible or justifiable to the university administration.

In some less enlightened institutions, the building program may be written not by the library administration, but by the university administration, as they perceive the library's needs, and in that case, probably tempered by what the institution is willing to budget for in the way of a library building. Such programs may or may not represent the real needs of the library and they may or may not represent the needs of the future of the library.

The new analytical architectural programming differs from traditional program statements, essentially, by involving the user from the outset. The most successful programming is achieved through interaction between the users, the owner and the architect. It is a three-stage process of problem identification, information collection, and information organization. The intent is to determine the objectives of the building; to identify all the available options for meeting the objectives and to set the stage for selecting the best options.

There have been a variety of techniques developed by the design professions for gathering information and transforming it into a design tool. The techniques draw on a whole range of social science research methods, but because architects are typically more graphic than verbal in their thought processes, they generally manage to find means of graphic presentation of the results.

This leads us to three questions that were posed to me by the conference planners. I will go through them in order. I am going to do a bit of translation on each one to put them into my lingo. My translation on the first question, "What does the architect need to know in order to design the library for optimal performance?" is "What are the design criteria for an academic library?" The first thing the architect needs to know, in my view, and the most important, is what the library user expects to accomplish. We have been talking about this for two days, but to summarize, he or she needs to be able to identify materials and sources of information; to obtain materials and/or information; to read, study, or research the material; make copies for later use; to return materials taken out earlier. Some users also expect to be able to read or study their own materials; to think without interruption; to be with people; to be away from people; to spend some time between classes; to get cool on a hot day; to get warm on a cold day; to simply sit and think and recharge their mental batteries.

Different users obviously have different intentions, and they can range all the way from a quick answer to a precise question to the serendipitous discovery of a whole new field. Ideally, all those things should be possible, but who can achieve the ideal?

The next thing the architect needs to know is what the staff expects to accomplish. The staff needs to be able to select, acquire, catalog, process and shelve materials; to organize information by creating or using finding devices of all kinds, to assist or instruct users to meet their needs. That is a pretty short list, but is fairly inclusive.

The next thing the architect needs to know is how the users and the staff relate and, possibly, where. The answer to that is going to depend on the kinds of assistance the public needs, and where in the building their problems are likely to arise. For example, if you have a multi-level library and you have a single point at which you can obtain information about a call number, if the user goes to an upper floor and searches for material and doesn't find it, how does he obtain the answer to where it is? Obviously from a staff member or some other device somewhere. In all of these things, not only space, but time, is a factor. You are talking about the distance that the user has gone in his quest, and how far he has to go back to get assistance some place else.

A fourth thing that the architect needs to know is how users and materials relate. That depends on how much access to materials the library wants the user to have. In some situations the answer would be zero access, for example, in the case of archival materials. Presumably archival materials are being saved because they are archival and they may used under very limited circumstances. With rare books, I don't think access should be zero or there is no point in acquiring them in the first place. Those are the low access extremes. The opposite extreme would be the fully open stacks where everything is available.

The next part of this process occurs when the user obtains the materials: where does he have to go to use them? Ideally, workstations would be nearby. This problem involves the whole range of print materials and non-print materials, how much of each kind and how they relate to each other, how they relate to the service points, and to the general and special reading facilities. There is a whole realm of questions to which only the library staff can provide answers.

Participant: Doesn't the time frame of planning affect the space requirements?

Nancy McAdams: That's a basic programming decision. You may be building for this year and this year only. I would say that is short sighted. You're not going to build for the next two centuries - that is too long sighted. You know that the university administration abhors an empty building. It depends on all sorts of elements, and on what your prospects are. You may be in an acquisitions surge so that current growth is not typical of future growth. There are all sorts of determinants. I think that is one of the hardest questions for anybody to answer. But the architect has to be given some kind of quantifiable data; how much to provide for now, how much to provide for in the way of growth space and how those factors interrelate. For instance, can microforms be traded off against bound journals?

The next thing that the architect must know is the space requirement for the various kinds of materials and activities. There are space standards for library materials, however, they are not true standards. There are some formulas and guidelines. There are generally accepted numbers that indicate such values as how many volumes per square foot, which you can use as a rule of thumb for determining spatial needs for a collection of a certain size. There are similar standards for the amount of space that you need to allow for a certain population on the basis of numbers, such as 25 square feet per person. Those standards are easy to find in publications and the best possible source for all of them for academic libraries is Metcalf's text. They have remained relatively unchanged over the years.

Someone raised the question this afternoon concerning the use of a standard 3 foot width for the carrels. How long has it been in existence, and has it been updated? I don't know the answer. The width has been standard for a very long time. As more and more libraries begin to make exception to it on a custom basis, as was suggested, that standard may be inched up. I'm sure it already has been inched up because many of you are working in libraries that were furnished in the fifties or early sixties in which the reader tables are 3½ feet across. The standard cited by our friend this afternoon was 48 inches, for two people on both sides of the table. This is generally acceptable. These things change and increase over time. I expect they will creep upward again particularly for institutions involving graduate students who undergo longer periods of study.

There are also some of these recognized formulas for reader configuration of various kinds and for reader spaces of various kinds of use. For example, microform readers are generally allowed a larger space than a standard reading position because you have to allow for the machinery. The reader has his own materials he brings into the carrel, and he has to have the microfilm, put it on, take notes, so it ends up taking twice as much space. This is one of the interesting space trade-offs with microfilm.

There is nothing simplistic about any of these space tradeoffs. If you substitute X number of volumes of bound periodicals for 3 little rolls of microfilm, then you've got to do something else in the way of reader configuration which may take more space than the X number of volumes. Another spatial trade-off occurs in the spacing of book stacks. (Referring to diagrams of people between bookstack ranges): The very narrowest one where you can't bend over to get the book is 2 feet, no inches clear. You have to get all the way up to three feet clear before you can bend over to get something from the bottom shelf without bending your knees. For one person to pass someone else, it takes 3'2" and then it keeps going up. As you get a little more activity - a book truck passes the person reading the shelves, somebody down on his knees and a person passing - these numbers go up to 3'9" and 3'10". Four feet are required to allow two people passing each other comfortably; 4'4" before you can have somebody sitting there. It gets larger and larger. Before you can have a pull out shelf and the chair in place and a book truck passing, you are up to 5'2". These figures, incidentally, are from Godfrey Thompson's book; it is full of diagrams of conventional configurations showing how much space they take and how really wasteful some of them are.

These kinds of space requirements, although not easily codified, are essential to understand. I think you can see an example of someone's not paying attention to the needs for movement if you look at the cafeteria where we had lunch today. You know how difficult it was to get your tray to the table, to get your own chair out without disturbing the person who was behind you. A lot of people approach the library seating situation as though it were restaurant seating. Your objective in restaurant seating, of course, is to pack in as many people as possible. When you get somebody who is used to moving around in a very controlled and limited situation carrying something, you expect them to be very careful in the way that they move. In a library it really isn't very satisfactory at all to be closely spaced because you don't want to disturb those persons who are seated.

The next thing the architect needs to know is the environmental conditions for people and for materials. Before any of us were concerned with energy consumption, designers thought in terms of optimal environmental conditions. We have to rethink that now and re-define the criteria for temperature and humidity control and lighting, so that we can come up with a situation which is economical and prudent in terms of energy consumption. We are very lucky in libraries in that conditions under which people are happy are also the conditions under which books thrive. As far as temperature and humidity are concerned, the satisfactory conditions for books and people are almost identical. There are rare instances where you want something more extreme in the way of temperature control. There are some fairly recent studies that indicate that much lower temperatures, in the range of 50-55 degrees, are better to prolong book life. Under conditions like that, you might just as well think in terms of putting those books in specially conditioned rooms and not try to house them where you have people at all.

Another part of the environmental conditions which we mustn't overlook are acoustics. The objective of a good acoustic environment is not to have a silent environment. It is to have one in which intrusive noise is minimized. There are a lot of things in the structure and the furnishings which influence the acoustical environment. It includes the shapes, the spaces, the materials, the sound producers within the environment and also the sound absorbers. Masses of books are very good sound absorbers. Carpet was discussed this afternoon and it is one of the very best.

A third and most important part of the environmental conditions is fire protection. Fire protection is a two-part thing - fire detection and fire extinguishment.

Editor's notes: The remainder of Ms. McAdams' presentation consisted of a slide show dealing with the newly constructed Perry-Casteneda Library and other historic buildings at the University of Texas. At the conclusion of her talk the following discussion ensued during Dr. Kaser's remarks as a reactor.

Kaser: I think when we are talking about space for the development of research libraries, we recognize that we are approaching a time after which each year we will need fewer square feet of floor space, rather than as has always been, more. I don't know when that time is going to come, but it will. I think we can all read the signs; we all are supposedly experts in our fields. In my private moments, I sometimes think that if we can develop enough library space to carry us to the end of the century, maybe thereafter we can start returning space to the university each year instead of adding more. So, in my own work with research institutions, I try to encourage people to think about the end of the century. I don't know whether that is right or wrong.

I don't believe there will be many more institutions like the University of Texas that will build complete, new, all-embracing total university libraries. The University of North Carolina is in the process of planning one now, and there are one or two others, but I think that the days of building these huge libraries, at least in this country are about to end. Instead we will makeshift, go to remote peripheral storage, build another lean-to, almost any device to carry us through to that magic time when our space needs will peak. I think this does impose on library planners a much stronger responsibility even than we've had before, that whatever space we build now have greater flexibility than we have sought in the past.

In the past, we have sought library flexibility so that we could convert reader space to stack space, or stack space to staff space; I think now we have to concern ourselves even more with designing library space that can be decommissioned as library space entirely, and assigned as other kinds of academic or university space. I am very much concerned about this point. I think we will not need much longer to build the behemoths that we have constructed in the past at Indiana, Chicago, Texas, Toronto, and a few other places. I am not saying those were mistakes at all: I'm just saying I don't think society's going to need many more of them.

One of the buildings I'm working on in Saudi Arabia will be the second largest academic library building, 750,000 square feet. And I lost weight talking those people down to 750,000 square feet. They wanted a 6 million volume capacity and I said, "Why?" They said they had a big book budget. I said, "How big?" The vice rector said "$4,100,000 per year for the next 10 years." I said, "You mean 4.1 million Saudi reals." And he said, "No, 4.1 million US dollars per year for the next ten years." I said, "Do you have any idea how many catalog librarians alone it would take to assimilate 4.1 million dollars work of books annually?" He said, "Yes, many." I told him maybe 80 full time catalog librarians and attendant staff could do that. I asked him how many catalog librarians there are in the entire kingdom at that time and he said "Nine." We managed to talk them down from 6 million volume capacity to 4 million, with expansion space for 2 million more and 6,000 seats.

They are negotiating right now to buy the entire University Microfilm catalog, one of everything that University Microfilm has, just as a core collection in western studies.

I suggested to the vice rector that he might watch for whole libraries that could be bought and he said "What is a big library?" I said "There's always Harvard." The vice rector laughed and said, "I wonder if it's for sale." I said, "I don't believe it is." Then he said "I suppose not. But I wonder if anybody's asked them recently?" But few libraries in the world can ever again aspire to such sizes.

That Battle Hall building that was opened in 1916 which Nancy showed us earlier was a landmark building. It was a real pace setter. It became the prototype building for virtually all the research library buildings built in the U.S. for 30 years thereafter. It was designed in 1912, Harvard was designed in 1913, Michigan in 1919, Minnesota, Illinois, Oklahoma, all of them came right after that. All the rest were simply modifications of Battle Hall in some way. some used cruciform stacks, U-shaped stacks, T-stacks; but this remained the solution to the problem of housing many books in American universities until 1945.

Ekblad: At a recent economic summit conference in Europe, the European countries that we are having a balance of trade problem with, have tied any conditions for reversing that balance of trade with an insistence that we decrease our demand for energy consumption. In addition to that our own energy reserves are dwindling at an increasing pace and projections for the future are dismal at best. My question was "what do you foresee in the future of a library of this type to cope with this problem?"

Kaser: You mean in terms of energy reduction within that building?

Ekblad: Yes. The consequences of an energy crisis in this country may be of magnitude that we don't even know about now.

Kaser: I'm sure they could be enormous. I have to think in terms of the library system. I think the most obvious thing to do would be reduce the number of operating hours. Surely in times of severe energy curtailment, people can organize their affairs in such a way that they can accomplish what they need to accomplish within the span of 60-70 hours rather than 100 a week. I think there are lots of things we can do in this country to solve problems in that way that we haven't taken advantage of yet, simply because we haven't had to do it yet. We could reduce the number of branches.

Participant: Wouldn't there be enough light if we removed every other light bulb?

McAdams: We have already done that. The physical plant people have made some extensive studies on the building already and have done some cut backs by taking one out of every four and have a 25% reduction there without any visible loss in light utilization. Beyond that, the building is zoned so that each floor is on 4 separate switches. Within each of those zones there is a very selective device which will let you lock out the lignting in up to 8 of the individual bays--each bay is 729 sq. ft. You can identify areas which are lightly used or totally unused, and leave them unlighted. With the emergency lighting panel you still have enough light to provide passage though that unlighted bay, and it is only 27 feet wide.

## Wrap-Up Session

Dr. Larry Larason: As a result of this institute, I now have two departments on campus who are considering the library as a laboratory and experimental site. I think we may learn a lot about what is going on in our building this way. Due to some prior contact, a third department may be interested in coming over to do some experimentation. You don't have to have an institute to get something like this going. I would like to encourage all of you to consider offering your libraries as experimental sites when you go home.

I would like to suggest that you try something else when you go back home. The other day when Dr. Sommer was here, I walked through my library with him. It was embarrassing for me. Consider you've got the world's greatest expert on library seating beside you or some other expert of your choice, and walk through your building. It is amazing, the things you see that you've never noticed. When I walk out of my office to see someone, I usually go straight to them and don't look around very much. I'm going to change that habit.

Dr. Sommer and I walked up to this one area and when I saw it I said to myself, "My God, Did I do that?" Dr. Sommer thought it was so bad he took a picture of it. When you get over your embarrassment, you can improve your environment.

The prospectus which all of you received (speakers, reactors and participants) was slightly different. The opening chapter was the same, about environmental programming. I would like to try to put environmental programming into a sort of coherent, theoretical framework by using analogies from systems analysis. None of the speakers have directly addressed this topic, in part, at least, because it is ill defined. It is a buzz word but I think it can be more than that.

A typical system is a black box. We don't know what goes on inside, we don't really care in many cases. You have input and you have output. The input enters the system and is either transformed, manipulated, transduced, transposed or whatever, and exits as output, in some way altered or changed. Most systems are considered to have some sort of filter up front so that the input is selective. The input has to be the input that this black box is designed to handle or it won't be accepted. The output is monitored either for quality or quantity, whatever you are looking for. The program alters the activity going on within the system based on the status of the input and output.

Let's look at a library as a system. The building and everything going on in it is a system, a black box. What sort of input do we have? We're talking about users, right? How do we filter these users?

Participant: Service points.

Larason: Do we really filter; anybody can walk in the door, right? We have a situation described as "garbage in, garbage out." There is no selectivity.

Do we monitor the output? Give me some examples of how we monitor output.

Participant: Circulation.

Larason: That's one.

Participant: Some other feeble statistics.

Larason: There's face to face interaction, which is monitoring in a sense. You are at the desk, you see the patrons and the kinds of problems they are having. Do you record your usage statistics or do you just record so many interactions? You know, we had so many questions about this, so many questions about that, where is this, and we interacted so many times. I would like to suggest that this could be a good source of output monitoring. We do user studies occasionally and that type of thing as other means of monitoring output. But we don't have any kind of continuous monitoring.

So what do we have? Do we have a system or what? Where is the program in the library system? If it is a system? What alters the state of the system? The functioning of the system?

Participant: You have procedure manuals.

Larason: That's one approach. But the program is in your heads. Only you know how to use that entire library. A student entering the building as raw input, unfiltered, unselected, has no idea of what the program of that building is. There are implied programs; the way furniture is arranged forces him to alter his path, if nothing else. But the program is in your heads. Now to what extent can we use the environment as part of the training module and teach the student simply as he walks through the building? I don't have an answer to this one, but it is something we should think about. Color coded arrows on the floor have been mentioned; maybe some of these things should be tried out.

For lack of a better description, I call a library a "passive system" since it provides no feedback to the user.

There are also other types of programs, such as how-to-use pamphlets. You have guided tours, or walking tours with the tape recorders, and you have signs. These are an integral part of your training program. They tell the students where things are, what to do, what not to do.

Of course, as we know, they don't read signs. From human factors engineering we learn that the average angle for human vision is 15 degrees below the horizon. Where do we put our signs? Do we put them up high? Off to the side? Maybe that's why they don't get read.

Does the library system actually affect the input? Is the output actually changed from what came into the system? We assume it is.

Participant: But we are not sure.

Participant: The only way you can tell is if a guy walks out with a book in his hand.

Participant: That doesn't necessarily tell you anything either.

Larason: No, it doesn't tell you whether he learned anything or found what he wanted. Our monitoring is very poor. Let me give you a couple of examples, not libraries, to show that I think something does happen in a system like this. Self service stores are also passive systems, very similar to libraries. They monitor through the cash register. And what did our marketing expert point out as the failure rate for new businesses? Nine out of ten? The cash register tells a more final story in many cases, but their monitoring is also poor.

There are two drug stores here in town. The one I usually go to is a dump. It's disorganized, cluttered; the shelves are too close together. Across the street and down a block there's this bright, modern, clean, efficient looking place. I hate that store. I go to the dumpy place because I feel like I'm getting a good deal. It's really a bargain place. At the other place everything is bright, the guys are so efficient they are right on top of you helping out. I did some comparison shopping. I buy this one brand of antacid fairly regularly, so I bought one at the dump and went across the street and bought a box over there. I am paying $2.00 more per box at the dump, but I feel better about it. So something does happen when you enter these weird systems. There is an effect.

One more example, also a drug store. I got this story by personal communication with marketer - not Dr. Dunn, however. They piped various smells into the drug store. First, they piped in a pop corn smell: people perceived the prices as being very cheap but they didn't quite trust the druggist; there was something sleazy about him. So they piped in a Lysol smell and the druggist seemed to be a sharp guy, but, damn! the prices were high. I'm not sure libraries can do too much with popcorn and Lysol smells but something does happen to a person entering a passive system. A store is a passive system, a library is a passive system. If you think about it, streets and highways are also passive systems. How do streets and highways monitor their input?

Participant: Traffic count.

Larason: That's a work measure. How about input filters? Well, you have to have a driver's license to be eligible to use the system. But, say you go D.W.I. and lose your license for six months; does the absence of a license keep you off the streets? They have problems too, right?

If you are in the middle of the system of streets and highways, do you always know where you are going? Have you ever tried to drive through a new interstate before the signs were all in place? They have the same problems we have. Their program is a road map which you have to carry with you. You have to stop what you are doing and consult the program. There are very similar analogies to be found in these various passive systems.

Can we consider the physical facilities as part of the training module? On page 2 of the prospectus there are some goals in environmental programming and some modes listed. I don't know whether you have read this or not, but if you have, I would like to augment #3 under Modes, which is "consideration of arrangement, display and design as mediating factors to decrease the cost of learning the system, and/or to increase the user's proficiency."

Let me explain 'mediating factors'. I'm not very good at explaining it, but I will try by an example. Say you have a stove with four burners - where do you put the knobs to turn on the burners? How do you arrange them? If you say arrange them in a row, which knob turns on which burner?

Participant: First knob, lower left; second knob, upper left, etc.

Larason: That is what you might expect, but there were some stoves manufactured just backwards. You can duplicate the same pattern as that of the burners or you can line them up and drop one lower than the other. The arrangement is a mediating factor. Just something that helps you understand what to do in this situation. So we might be able to use the environment in some ways by designing it to show where things are, help the user to find things.

Vision to a target is important. Say you are looking for the documents department; if you walk into the library and you can see that department immediately, you know right where to go. But, of course, we have book stacks. This is a major trade-off: sight to desired targets versus book stacks. We have to have book stacks, but they always interrupt our lines of vision.

Expanding a little bit on mode 3, we attempt to regularize behavior at a specified level of performance. In other words, let us help the user find things on his own without having to ask. We all know there is a reluctance to ask, so let us do what we can to help him serve himself. The best environment, and I'm quoting, I think, Christopher Alexander, is not one which seeks to solve men's problems, but which allows them to solve them on their own. We can attempt to decrease the time and cost to learn the system's characteristics, again, by display, mediating factors, and so on.

Let me say one more word about mediating factors. We use these all the time. Our call number is, in a sense, a mediating factor. We arrange the book shelves in rows, just like a system of streets and highways that are numbered, for example, First, Second and Third Avenue-- you know these are going to flow in some kind of regular pattern. There is a mediating factor in the arrangement of stacks. One thing which irks me is call number flows crossing major aisles. I think that it is very confusing to a patron. It has always been confusing to me in any library. A major aisle should indicate a break in your call number flow.

I would like to point out there are limitations to what you can do with environmental programming. You obviously can't help them use Reader's Guide, or Chemical Abstracts. There's no way you can do that by designing your environment, but you can help them find an index or a reference desk.

I'd like to discuss something now that I hoped Dr. Dunn would get into, but he ran out of time. Store layout. Dr. Dunn ran through a classification of types of goods you find in stores. What kind of a good is reference service? I'll just go ahead and say what I'm looking for. I think we are selling, at least in part, an impulse good--something you buy that you hadn't planned to purchase. The user comes to the library and he encounters a problem. In that case, you are obviously selling an impulse good. Why do they put chewing gum, rolaids, and Woman's Day right next to the cash register? These are impulse goods. You don't come to the store to buy them. They put these kinds of goods in an intercepting position.

Participant: I don't think we are selling impulse goods at the reference desk. I don't think what we have on our reference shelves makes people think they might want that bit of information.

Larason: In some cases we sell a shopping good; people have a favorite librarian and go to her. But I'm not talking about what you have on the reference shelf necessarily. Let me give you another example. I did a bit of work on reference services. I was all starry eyed; I was going to change the use of reference service by moving the desk. The situation we had at the school where I did my research was a little bit unusual. The reference service was offered from an office. You had to enter a door into an office to ask for help, which is obviously bad. What I did was take a small, single pedestal desk, decorate it up a little bit, move it out onto the floor in three different positions. Usage at the three different positions proved the same, no different. At least, not statistically. However, I discovered as a by-product, that the null treatment, the office, was lower than the three outside desk positions. The outside positions increased the use of reference services significantly over the office.

Participant: I don't think that is an impulse good. I think the difference was that they knew you had a service to offer, before they didn't.

Larason: That is part of it, yes. It is very difficult to separate these two factors, but visibility is a part of the idea of interceptive positions for impulse goods.

Participant: I just don't run into that many people who, on impulse, ask a question.

Larason: You are also dealing with a specialized clientele. (The Questioner was a Government Documents Librarian.) How do most people feel about that?

Participant: The times I usually get impulse questions are when I am away from the desk.

Larason: The roaming librarian reduces the cost of approach to the librarian. They might not ask the question if they had to walk across the room or enter an office. That is how you market an impulse good: by reducing the cost of approach. It may be a trivial question, but if they can't find a book it is not trivial to them. They may get frustrated and leave mad rather than asking for help. I think interceptive locations for reference desks, or information points of any kind, are important.

Editor's note: For a full discussion of reference service as an impulse good see Larason, Larry and Judith Schiek Robinson: "The Reference Desk: Service Point or Barrier" in RQ, Spring, 1984. The remainder of Dr. Larason's presentation concerned research on library seating. This has been elaborated on in "Personal Space and User Preference for Carrel Arrangement Patterns in an Academic Library," by Larry Larason and Rebecca DiCarlo, 1982, ED 222 166.

The wrap up session continued with individual comments by the Reactors.

## WRAP-UP SESSION

Dr. David Kaser:

My own reaction to the institute is that we spent a lot of useful time discussing ways of creating desirable ambiances within libraries. A question that arises in my mind, however, is "ambiance for what?" Presumably, an ambiance conducive to the successful or effective fulfillment of the library's responsibility.

We started out assuming that we have a fairly common notion amongst us as to what the library is there to do. We talked a lot about the "whats" of librarianship and a lot about the "hows", but we didn't discuss at all the "whys" of librarianship. Maybe we can assume that we have a fairly good grasp of the "whys", and yet, I would guess that if we were to ask each of us in the room to write down why we have a library, we would get many widely divergent responses. I don't believe we do have a common understanding of why we need libraries in the first place.

I think that this unclarity, or lack of commonality, in our thoughts about libraries raised its head at a few points. We discussed sociofugal and sociopetal space. Bob Sommer explained that some people seek sociofugal space when they come to libraries and some seek sociopetal space, and yet if we had a clearer notion as to why the library was there in the first place, mightn't we perhaps find ourselves wanting to encourage one and discourage the other? Maybe there is something inherent or basic to the inexorable nature of libraries that would prompt us to try to get out of one business or the other. I don't know which one it would be.

We had the same kind of unclarity yesterday morning when the social worker suggested that we respond in one way to people who behave in libraries in ways other than we choose and then the police officer suggested that maybe we want to respond in another way. Maybe this difference grows out of differing judgements as to why the library is there. Some people said throw the beggars out, and others say just deflect and neutralize, or something of that kind.

With regard to Dr. Dunn's paper on marketing library services, I am not sure that we are in total concurrence that it is desirable, for example, to raise circulation in libraries. Maybe we could give better library service more consistent with the overriding social utility of the library if we somehow managed to circulate fewer but more relevant books. Maybe circulation, per se, isn't something we ought to be seeking.

I find little discussion in the library community anywhere about the whys of librarianship. However, I find a lot of concern about the whys of librarianship outside the library profession. I was once presenting my budget at a Cornell board meeting when a member of the board of trustees stood up and said, "Now let me understand, this is a six million dollar annual budget?" I said, "Yes sir." He asked if there were other costs to Cornell University to operating this library that didn't show in the budget. I said I supposed there were. The cost of amortizing the building was not shown in the budget, the cost of physical maintenance to the building was not shown, the cost of administrative overhead, that is, the payment of the payroll department, personnel department, grounds, and so forth, was not shown there. I suppose that a good accountant would suggest that opportunity costs would have to be taken into account. He said, "Would you suggest, then, that the total cost to Cornell University is this year might run eight or nine million?" I said, "Yes sir, that might be a reasonable guess." "Dave," he said, "Do you have any idea how much

Cornell has to put aside in endowment in order to assure an eight to nine million dollar return to run that library?" I suggested perhaps it might exceed one hundred million dollars. He said, "Yes, and what in the name of heaven can you do for Cornell University that is worth $100,000,000?" I just never thought about it quite like that. We really aren't well equipped to answer this kind of hard searching question. We somehow assume that the $100,000,000 is going to be there. All we have to do is spend it. We know what to do and how to do it, but when somebody asks why we have libraries in the first place we don't handle the question very well.

I could catechize. I could say, "Jesse Shera says that the function of the library is to maximize the social utility of the graphic record," or I could quote from Cornell library's mission statement--and we had a pretty good one, better than most institutions--"We provide bibliographical, physical and intellectual access to recorded knowledge and information in accord with the teaching and the research functions of Cornell University..." This is like saying "There is one god, Allah; Mohammed is his prophet." We don't really think through these things, we just memorize them. When asked a question, we give an answer. I think that it might be useful sometime for us to convene a group of this kind under somebody's auspices, in a retreat location. We could start asking ourselves some of the real philosophical questions that are behind our profession; the kinds of questions that we ask ourselves when we set out to develop a religion of our own.

We need to ask ourselves as librarians, like Socrates, "Why am I here?" We need to ask with Montaigne, "What do I really know?" We need to ask ourselves with the rich young ruler from Galilee, "What must I do to be saved?" I believe that few if any of us, as librarians, ask ourselves these tough questions.

I think that if we would spend some time getting to these basic issues of why there are libraries in the first place, we would then find greater commonality among us when we go into issues of what kind of environment we are going to try to create--an environment for this purpose, or maybe for some very different purpose. Or maybe we would decide that society doesn't need libraries. We may soon be, in the face of Proposition 13 considerations, forced to adopt some kinds of retreat routes. We require a lot of money and society may not be prepared to spend that much on us any longer. I wonder where we will go if we have to retreat.

We don't really have a retreat strategy, I suspect. I grew up in military schools and I remember that one of the first things we were taught to do when we consolidate a new position, is reconnoiter a retreat route. Hopefully, you will never have to use it, but if you do, you'd better know where you're going to go and not let it become a rout. If librarians have ever reconnoitered retreat routes we have long since given it up.

People who are supposed to understand things like this recommend that you retreat to what you do best. You can't go on doing everything you have got to stick with what you do best. I am not sure we even have any idea in libraries of what we do best. We have long been a "can do" kind of place. Anything anybody suggests we might do, we will do it. Want to circulate tricycles? Sure. Bring it in here, we will circulate it. On the other hand, bicycles, well, I'm not real sure about bicycles. I wonder what kind of message society gets when we circulate tricycles and don't circulate bicycles. How do we make this distinction in the eyes of the public? I think there are libraries that circulate garden tools, but they don't circulate roto-tillers. So why a manual tool, but not this power tool over here? We circulate games to children. Do we circulate tennis rackets? Where do we move from one kind of game to another? When I want a car, why do I rent it? Why don't I just go to the library and check it out. I got my tricycles there when I was a boy. People want us to do all kinds of things, and in general, we do anything anybody wants.

I suspect that we confuse society by the lack of specificity in what we attempt to do. What do we do best? We have pictures in libraries, but I don't believe that we are the best art galleries in the world. We have music in libraries, but I doubt that we are the best concert halls in the world. We have artifacts in libraries, but I doubt that we are the best museums in the world. Just what should libraries attempt to do and be?

I would hope that we could ask ourselves, "What is it that society must have from us?" What does it say in the fine print of our social contract? The irony of this is that if Larry had gone to the U. S. Office of Education and asked for money to sponsor an institute to determine why we need libraries, he wouldn't have gotten it. Furthermore, if he gotten that money and held such an institute, none of us would have come. How many of you would have come to Monroe to discuss why we need libraries?

If we ever have an institute of this kind again, I would feel more comfortable if we would start out trying to find some common ground amongst us as to why we need libraries in the first place. Maybe the discussion would have taken a slightly different tack.

Roberta Scull:

I think, as far as I am concerned, re-thinking why I am a librarian, what is librarianship, why librarianship, has perhaps been what has happened to me during this conference. And, maybe, what we as a group can do in librarianship. I think that during this week practically every strikingly pleasant and unpleasant experience which I have had as a user of the library, in library school, and in actual librarianship, has come to my mind. Many of these things I have related to you and we have all shared, and many of them are still inside. Most of these things I haven't thought of for a long time and yet they have made an indelible mark on me as a librarian. When I was six years old I trudged through back yards and up and down hills to get to a little one-room library that had no windows in it, but which had a very friendly librarian who made that library. It was the social element that made that library and that social element that opened up the world to me.

At the age of nine, we moved and I had the grand, prestigious experience of being able to catch the city bus and go down town to the big Carnegie library. When I walked up those steps, it was not the same place as that little hole in the wall. It wasn't the same place because it had an impersonal atmosphere. The librarian was behind the reference desk that, to me, was this high. The children's collection was off in another room and I was embarrassed to ask where the children's collection was. I didn't want her to think that I was stupid.

Then I went to college and it was worse. We had a large library with many branch libraries throughout the campus. Most of the collection was in closed stacks areas. I always felt that if I persevered to find my material and get it home, it was like playing monopoly. You had passed "go", collected your $200 and won the game. It was a challenge but it was most distasteful to me. I never wanted to be a librarian; it never entered my mind to be a librarian. I was a school teacher, and I was a happy school teacher for a long time. I won't tell you how I started to library school or why I became a librarian, but during library school, as well as while I was a teacher, I had some really unpleasant experiences with librarians. I thought of librarians like these outsiders, all of them little old ladies that shrivel up their faces and look at you with mean eyes and most of them have buns on their heads. Of course, we know that is not true. Maybe most librarians are not like that, but it made an indelible impression on me; and I vowed that I would try to be the most approachable person around.

I could ramble on about personal experiences and theorize how and why we do things. Your ideas are as good as mine. Your personal experiences are as good as mine. I would like to summarize by saying that we, as librarians, the way we act; the way we look; the way we speak; the way we approach other professionals, as well as our users, and the library itself; the physical structure; the floor plan; directional signs; the whole bit! -- we compose the environment. We are part of the environment which the user faces when he enters our work place, our environment, which will determine the users' response to us and to our service.

Larry Stallings:

As Larry Larason mentioned at the beginning of his talk, I think we have a real opportunity here to use the things we have learned during this institute and to take them back. I know I intend to. I guess the real test of a conference or institute is what we take home, other than ptomaine from the campus cafeteria. For me the institute has been a roaring success. By a quick count I made a few minutes ago, I will be able to take back at least 26 specific ideas that I can apply to my library during the following year... and this is the library that I thought was perfect five days ago. As a matter of fact, I was thinking before I came that it would be nice to get some ideas to take back to my friends for their libraries. But I will be using them myself. That's 26 ideas there and 7 pieces of data that I plan to use later, most of which have to do with architecture.

One thing that I can use is the idea of the library as a laboratory. I think I can really apply that to the Roux Library. I need to replace some carrels with some tables. I plan to develop some user studies based on 2 or 3 different suggestions we had from some of the speakers. So I really am excited about what has gone on here.

Let me add just a few remarks to tie in some of the ideas from these four days by mentioning what went on at Florida Southern College before I got there. Frank Lloyd Wright was the campus architect at Florida Southern for more than 20 years. The library building we are in now was not designed by him, but he did design the previous library building.

Since he is rather famous, you may be interested in the building he designed. We have the largest collection of his architecture any place in the world. He was excited about building a community. Until that time he had only built a house here and there and he wanted to have a place where he could build more than one building. When he was invited to Florida Southern, he jumped at the chance. We have seven buildings on campus that are his. His philosophy, as you know, was out of the ground, into the air. He tried to make the buildings look like the surroundings. Environment was very important to him. The blocks that were made for the buildings came right out of the earth on the campus. Many of them were made by the students themselves. The library, in fact, was built during war time and the women built almost the entire building. There were construction people on campus who helped, but the students made the bricks themselves.

Frank Lloyd Wright was aesthetically way ahead of his time, but functionally, there were some problems. The library that he built was semi-circular... half of it was in a circle and the other half had weird angles. I didn't get to see the library. I have seen pictures of it and talked with many of the faculty members who were around during the time. They said that equipping the library, with square shelves around a circular building was rough. But once in, it worked better than anybody thought it was going to. This may be a case of adaptability, the ultimate test. But everybody seemed to really like that building... I think partially because they built it themselves, so there was a kind of pride in it that usually isn't there in a library building. In fact, there was some animosity when they built the present building, in spite of the fact that the Frank Lloyd Wright building was very overcrowded. A lot of faculty members who had been there a long time did not want to move. They loved that old library building. There was a kind of cozy effect to it that many new structures don't have. It was well known at the time; we had a lot of visitors to the campus and that helped build pride in the place. Students liked it as a social gathering spot. It had good security, although I don't think they were even considering that at the time.

This kind of answers the question that was asked a while ago: do architects really know about libraries. In Frank Lloyd Wright's case, from what I understand, no, he didn't. But as it turned out, it was the right setting, the right library, and the right time. It functioned very well for around twenty-five years.

Two things they say about Frank Lloyd Wright are that he was very short and that he never went to the bathroom. He somehow forgot in the original planning of that library to put in rest rooms. It was almost an afterthought. Also, he had promenades that connected his seven buildings and they are very low. I don't know exactly how high--not much more than six and a half feet or so, which seems awfully low, even if you are five feet, nine inches, like I am. You are constantly ducking even though you don't really need to. They say it kept us out of big time basket ball for years. We couldn't recruit anybody more than six and a half feet tall because they couldn't walk in the hall ways.

Sam Dyson: I was a little disturbed when Larry asked me to be a reactor in this program, primarily because of the title of the program, "The User Encounters the Library." That, to me, was kind of foreboding. I see the user standing in this wide, open space with his sword and shield in hand, facing the library, which has changed into a dragon. We are fixing to get encountered. To some extent, I think that has been the the experience of some users. You are in a wheel chair and you have just one little tiny curb to overcome, if you can't overcome it, it becomes a real dragon that you have to fight. I think we have gotten a new insight into that in these past few days. I was a bit disturbed over the terminology of the institute, but I think our speakers have given us some ammunition to let down the boundaries, so to speak, so that the user may not necessarily encounter the library, but may enjoy the library.

I agree with David Kaser in that we need a philosophical statement of librarianship. We have made some weak attempts at it. I would like to suggest that I can think of no one better to write that than you, David.

I will share just a few of my overall impressions of what we have done in the last few days. First of all, I have been impressed with the magnitude of the task of a librarian. It is mind boggling to me to realize that we have to know so much about so much. Management, environmental psychology, architecture, psychology, neurology. You name it, and it seems that we have to know something about it in order to properly function as librarians. You begin to understand why the library schools really can't do all of that. They can't give you in your year of graduate school everything you need to know about librarianship. Sometimes when we get out into the field, we write back to the school and complain, "You never told me anything about this!" What you are facing now is perhaps a different world than it was when you were in library school. Everything has changed. I can see that I need to take some environmental psychology, management, budgeting, etc. Management by objectives and zero base budgeting begin to snowball on you; you wonder how one person can do all of it. So again, I have been impressed with the magnitude of our jobs. If this institute has done nothing else for me, it has once again reminded me that we have an awesome responsibility in serving our publics.

I am also struck once again with the fact that we have a commonality of problems. All of us have had peekers, and deviants of various kinds and we have all had our reference interviews that weren't quite what they should have been. We have all made our mistakes and we have all learned by those mistakes. We are all human and I think that this is a reassuring thing. You know, sometimes we go into our ivory towers and feel that we are the only ones that have any problems at all.

What are you going to do when you get back home? Are you going to say it was nice to meet all those people and now back to work? You may say you are going to do this and this that was suggested at the institute, but that mountain of work on your desk says "No."

I beg you (and me) to not succumb to the temptation to go back and do it just as we have always done it. We have gotten some good ideas here. Our speakers have really sparked our imagination. They have told us things that we can do that we didn't realize we could do. We just didn't know the jargon or the statistics. But we can make our own observations and we can make our libraries better just by looking, without a lot of high powered stuff. We can make it so that our libraries are not a dragon standing out in the field breathing fire at the user, but rather an open tool to help our students and faculty accomplish what they are there for. Let's go back and to do these things that make our libraries more useful and pleasant to be in, and more efficient to operate.